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100k Compilation Procedures and Specifications

Compiled by
the Geographic Sciences Group
National Applied Resource Sciences Center
SEPTEMBER 1999

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**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
NATIONAL APPLIED RESOURCE SCIENCES CENTER
DENVER FEDERAL CENTER, BUILDING 50**

**P. O. BOX 25047
DENVER, COLORADO 80225-0047**

November 10, 1999

In Reply Refer To:
9161 (RS-120)P

Informal Memorandum

To: Geographic Science Coordinators

Subject: Compilation Procedures and Specifications
for BLM 100k Surface/Minerals Management
Status maps, Automated Mapping process.

The attached document represents a revision of the November 1996 version of the *100k Compilation Procedures and Specifications* manual. This document partially addresses the transition from the manually-compiled to the digitally-compiled (automated) 100k maps. It is the intention of NARSC to develop, in the near future, a concise and comprehensive procedures and specifications document specifically targeting the BLM 100k automated maps.

Automated mapping will improve the quality and consistency of the BLM 100k maps, decrease production time, reduce compilation, materials, and production costs, and increase rates of revision while meeting National map accuracy standards and customer product needs.

Automated 100k maps are entirely data driven. They are as good as the digital data available. The automated process combines available digital data from the public land survey system (PLSS) using BLM's GCDB database, USGS's digital line graph (DLG) files for geopolitical boundaries, hydrography, hypsography, and transportation. Recreational features, land ownership, and special areas (Wilderness, etc.) will be provided and/or identified by the State BLM offices.

If you have questions concerning the attached procedures document or the automated mapping process, please call the 100k Production Supervisor, Bill Jackson, at (303) 236-7345 or the Automated Mapping Lead, Chris Smith, at (303) 236-7381.

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**100k COMPILATION PROCEDURES
AND SPECIFICATIONS**

Compiled by the Geographic Sciences Group
National Applied Resource Sciences Center
ver 9/99
SEPTEMBER 1999

100k COMPILATION PROCEDURES AND SPECIFICATIONS

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I. GENERAL

Bold items throughout these specifications flag compilation procedures for standard and optional features which the States should follow, unless special arrangements are made with the National Applied Resource Sciences Center (NARSC). Any Questions please contact NARSC 100k Production Supervisor at 303.236.7345.

A. COLOR GUIDES

States should compile three separate overlays (color guides)*:

1. **Surface Status Revisions**
2. **Mineral Status Revisions**
3. **Base Revisions** - all other revisions and optional features that a State has selected for portrayal (i.e., recreation, roads, route markers, fences, etc.).

*If surface and mineral status revisions are minor, the revisions may be combined on one color guide. Extra color guides should be used to prevent confusion and clutter.

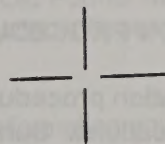
The color guides should be registered to the 100k stable base matte mylar to compile any status or base corrections, including extensions where applicable. If the State Office does not have a stable base mylar, NARSC will provide one upon request. Registration should be made with a sharp black (2H or harder lead) pencil using the following type of corner registration:

Like this:



Map Corner

Not this:



Map Corner

Add a title block in the lower right corner of each color guide, listing the following:

1. **Map name** (100k name, State)
2. **Date of data/color guide**
3. **Type of data shown on color guide** (i.e., surface, mineral, recreation, roads, boundaries, etc.)
4. **Name and telephone number of the person who completes the color guide**

When areas of two or more States (each State covers at least 1/8th of the map) are portrayed on a 100k, the State requesting the 100k revision should coordinate with the other State(s) for revisions/additions to the other States' portions of the map.

When two or more States (minimum of 1/8th of map for a State) are portrayed on a

100k, the map will portray the optional features for the respective States to the State line. A standard disclaimer has been added to all 100k's as part of the BLM State-Specific Symbols Legend:

Due to diverse BLM State Office requirements, unique features have been selected for portrayal in each State. Where a map has coverage in two or more States, the map will portray the optional features selected by the respective State Offices.

When a 100k color proof is returned to a State for review, the color guides and other original source materials received from the State accompany the color proof. Upon completion of the State review, all color guides and original source materials should be returned to the NARSC with the edited color proof. After the 100k has been shipped to the printer, the original source materials will be returned to the State.

States should be aware of the procedures required to change or add names information. Please refer to the attached Instructions for Name Changes and Name Additions, page 76. Questions regarding geographic name changes or additions should be directed to the Bureau of Geographic Names (BGN) Committee representative Chris Smith at 303.236.7381.

If there are either no State-Specific optional features or no additional State-Specific optional features other than those shown on the current map edition, a note to that effect must be added to the Surface Status Revision color guide so that NARSC personnel will know that all revisions have been received.

B. COMPILATION PROCEDURES

100k compilation procedures for both State and NARSC personnel are included in these specifications. Surface and mineral status compilation procedures for the States are covered in the Standard BLM Color Guide Compilation Procedures, revised November 1992. Any questions should be referred to the NARSC 100k Production Supervisor, 303.236.7345.

For clarity, terminology used on the color guides (i.e., surface ownership, minerals designation, symbology, etc.) should be consistent with that used in these specifications and the Color Guide Compilation Procedures.

A new digital specification manual will be developed as procedures are finalized.

C. COMPILATION ACCURACY

Compilation should maintain accuracy to 1/50" (+ or - 169'), maintaining National Map Accuracy Standards.

D. MAP COLLAR FORMATS

The map collar is the map portion which surrounds the perimeter of the map body and includes both text and symbology. Three map collar formats are currently in print:

New Format - the Land Status and Minerals Legends are shown below the map body. The map has a cover panel in the upper righthand corner (See page 7). This format is used for all reprints, unless the maps have previously been done using the automated or digital format. If minor changes are made to the information within the map body, the reprint with New Format may or may not be replaced with the Automated Format.

Automated Format - similar to the New Format, this format also includes a State-Specific Symbols Legend, a Recreational Symbols Legend, and a Points of Interest Legend below the map body (See page 8). This format may be used for some reprints and all manually produced revisions.

Digital Format - similar to the Automated Format, this format is used with a totally digitally produced revision.

It is NARSC policy, to convert ALL full revision and recompilation maps to the Automated Format (as staff resources allow) and ALL reprints to the Automated Format. This policy has been implemented to standardize the appearance of all BLM 100k products.

E. JOB TYPES

RP = Reprint procedures are used to provide a quick method of replenishing shelf stock until an extensive revision can be completed. Marginal information is updated and format changes are made (see JOB SUBTYPES C1 and C2, below). Old Format maps will be reprinted with the Automated Format (minus the International Symbols Legend and the BLM Recreation Sites, Trails, and Areas Legend).

FR = Full Revision procedures are used to update land status information and include 100k features requested by each State. Full revisions require input from the States in the form of stable-base color guides and appropriate photography or compilation materials. Marginal information is updated and the Automated Format is used (see JOB SUBTYPES C1 and C2, below).

F. JOB SUBTYPES

Two subtypes may also apply to specific 100k's:

A C1 Conversion is a map of any of the above types for which NARSC has new bases in-house. Topography will be shown when available from USGS. Automated format map collars will be used.

A C2 Conversion is a map of any of the above types where the old-base format is converted to an Automated Format map collar.

II. INSTRUCTIONS FOR STANDARD SYMBOLOGY

A. COLOR SYMBOLOGY

Screen percentages are based on the 1996 BLM Publication Standards.

SCREEN PERCENTAGES

Feature/Plate Number	Black	Yellow	Magenta	Cyan	PMS 471
Culture/Plate 4	100				
Roads/Plate 5			100		
Contours/Plate 6					100
Drainage/Plate 9				100	
Public Lands/Plate 10		50	10		
#O&C Lands (BLM)/Plate 11		60		30	
National Forest/Plate 12		20		20	
National Grasslands/Plate 13		30		20	
National Parks, Monuments/Plate 14			20	20	
Indian Lands, Reservations/Plate 15		50	30		
Military Reserv, Corps of Engrs/Plate 16		8	30		
Wildlife Refuges/Plate 17		30		50	
Bankhead Jones/Plate 18		13	20		
State Lands/Plate 20				30	
+Bureau of Reclamation/Plate 21		30			
+Other Federal Lands/Plate 28	20				
+State, County, City, Wildlife, Park and Outdoor Recreation Areas/Plate 29	20				
BLM Back Country Byway, Backway and National Trail Buffer/Plate			30 biangle		
Special Area, BLM Rec Area Buffer/ Plate 4B	20			30	

#O&C Lands (US Forest Service) are not shown in the Land Status Legend, but are portrayed the same way as other National Forest lands.

+This color symbology is based on NARSC information bulletin No. RS-99-086, dated May 20, 1999.

NARSC Procedures:

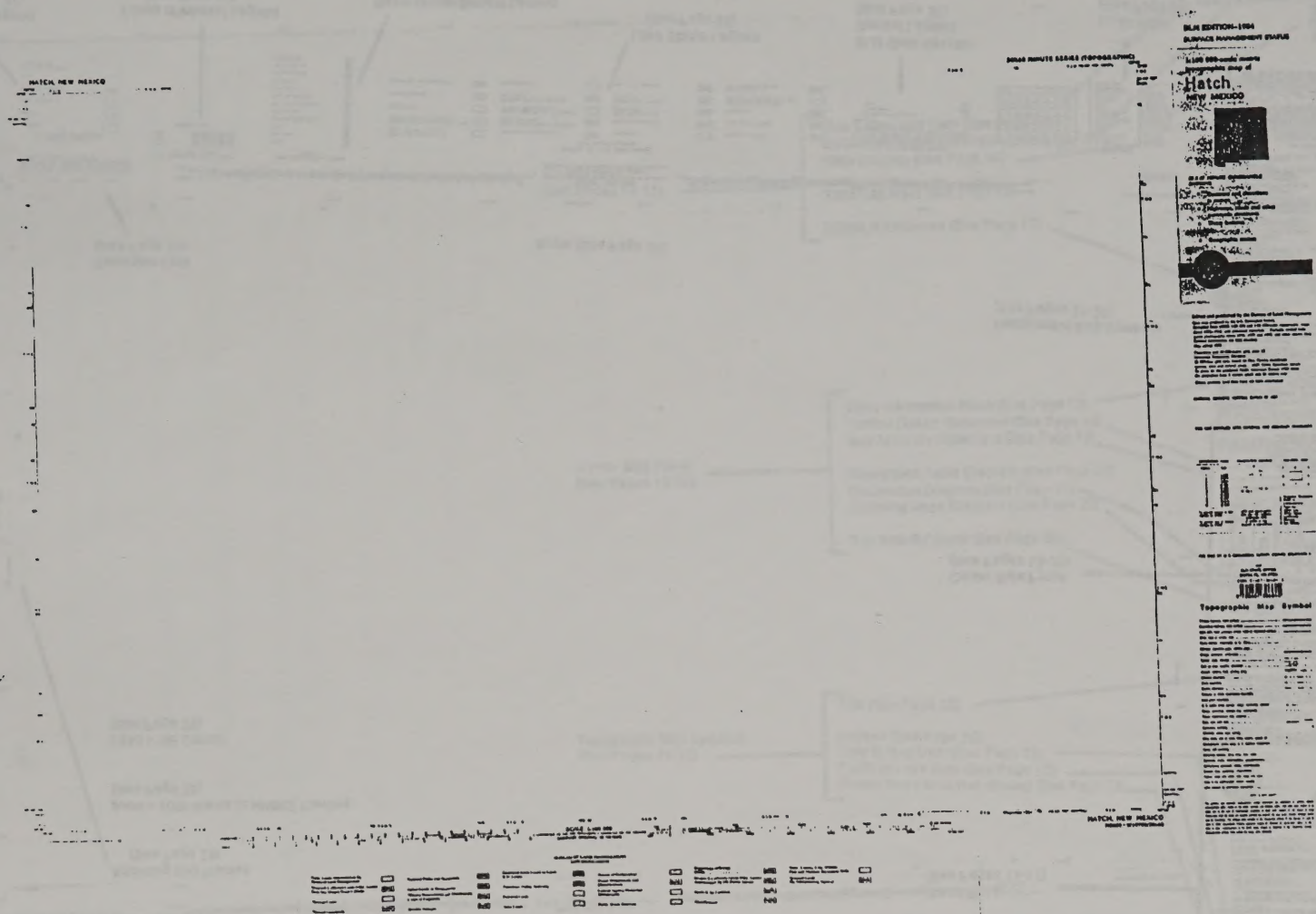
- a. Minerals symbology remains the same
- b. Map-separate labels should be changed to reflect current color percentages.

C. MAP COLLAR FORMAT

A combination of automated- and manual-stickup type is used on the map collar (the text and symbology surrounding the perimeter of the map body). Parts II and III of these specifications discuss specific portions of the map collar.

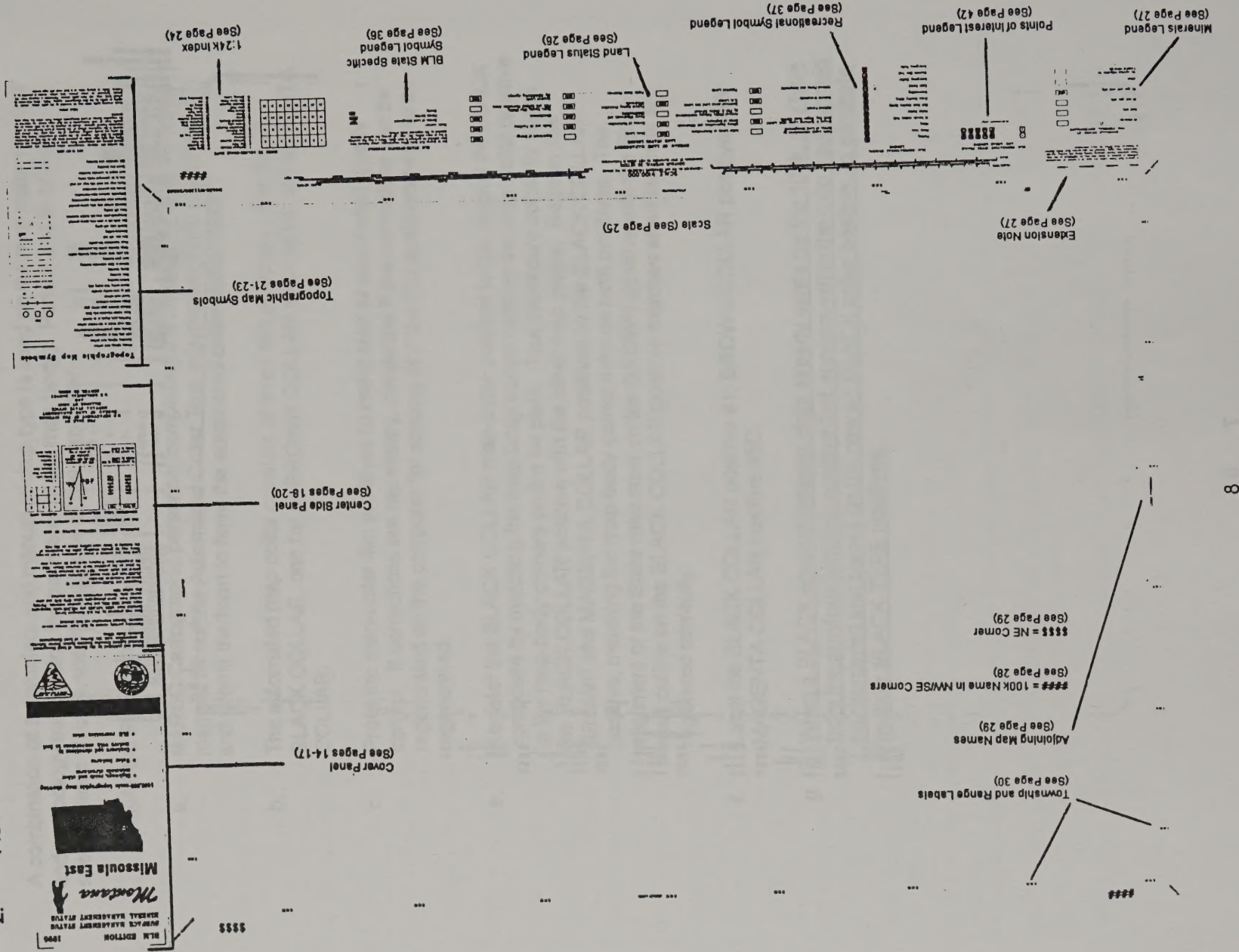
NARSC Procedures:

- a. NARSC Cartographic personnel completing the manual revisions for the map will fill out the Automated Collar Text Information Form (See page 13) and submit the form to have the automated collar plates made.
- b. The automated map collar consists of three film positives - one for all BLACK COLLAR, one for all BROWN COLLAR and one for all MAGENTA COLLAR.
- c. Proof the map-collar film positives to make sure all automated type is correct. If corrections are necessary, determine if the corrections can be regenerated on the computer for splicing or if the film positives need to be regenerated.
- e. Register the BLACK COLLAR map-collar positive to the original #4 BLACK composite by matching the map body corner ticks on the map-collar positive to the map-body corners on the #4 plate. This procedure correctly aligns the BLACK COLLAR positive with the other map plates. Register the BROWN and MAGENTA COLLAR positives to the BLACK COLLAR positive, matching the map-body corner ticks on both positives. The alignment of the State map inset on the BROWN positive with the State map outline on the BLACK COLLAR positive matches when the ticks are registered correctly.
- f. Label the BLACK COLLAR positive #1; BROWN COLLAR positive #6B; MAGENTA COLLAR positive #5C.
- g. When a BLACK positive lettering plate already exists for the 100k, any type from the previous lettering positive that appears within the map body should be reordered and placed on the new #1 BLACK collar positive, to eliminate multiple BLACK TYPE positives.



This is a reduced sample of an automated map collar when the black and brown film type positives are combined. Page numbers refer to the pages in these specifications that give detailed information about specific portions of the map collar.

2. AUTOMATED COLLAR FORMAT (BLACK + BROWN + MAGENTA COMBINED)



3. AUTOMATED COLLAR FORMAT (BLACK POSITIVE ONLY)

Cover Panel
(See Pages 14-17)

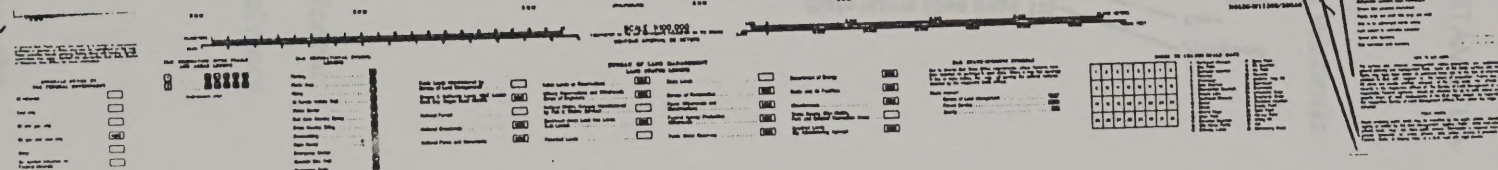
BLM Edition and Date (See Page 15)
Surface/Mineral Mgmt Status (See Page 15)
State Insignia (See Page 16)
DOVBLM Emblems (See Page 17)

Center Side Panel
(See Pages 18-20)

Base Information Block (See Page 19)
Vertical Datum Statement (See Page 19)
Map Accuracy Statement (See Page 19)
Conversion Table Diagram (See Page 20)
Declination Diagram (See Page 20)
Adjoining Maps Diagram (See Page 20)
"For Sale By" Block (See Page 20)

Topographic Map Symbols
(See Pages 21-23)

Title (See Page 22)
Legend (See Page 22)
Note to Map User (See Page 23)
Public Access Note (See Page 23)
County Road Note (not shown) (See Page 23)



AUTOMATED COLLAR FORMAT (BROWN + MAGENTA POSITIVES ONLY)

Tucson

State Name (See page 15) -

100k Name (See page 16) -

State Map (See page 16)

E AUTOMATED COLLAR TEXT INFORMATION FORM 404

Submitted by _____ Date _____
BLM Edition _____

D. MAP PLATES NUMBERS

- 1 - Black Collar/Text
- 2 - Projection Plate (UTM Ticks)
- 3 - Status /Boundary Lines
- 3A - Supplemental Scribe
- 4 - Black Composite
- 4B - Boundary Buffer
- 4F - Fences, Found Corners, Pipelines, Powerlines, Triangulation Stations, Well & Windmills
- 4S - Section Number (this plate will not be used in the digital process)
- 4X - Land Net Extension
- 5 - Roads
- 5A - Additional Roads
- 5B - Trail/Byway Buffer
- 5C - Magenta Collar/Text
- 5X - Road Extension
- 6 - Contours
- 6A - BLM Emblem & Bar
- 6B - Public Access Buffer
- 6X - Contour Extension
- 7 - Intricate Surface
- 8 - Sand
- 9 - Drainage
- 9A - Additional Drainage
- 9B - Drainage Names
- 9C - Open Water
- 9X - Drainage Extension
- 10 - Public Lands
- 11 - O&C Lands, Coos Bay Wagon Rd (BLM)
- 12 - National Forest
- 13 - National Grasslands
- 14 - National Parks & Monuments
- 15 - Indian Lands or Reservation
- 16 - Military Reservation & Corps. of Engineers
- 17 - National Wildlife Refuges
- 18 - Bankhead-Jones Land Use Lands
- 19 - Tennessee Valley Authority (No Lands West of the Mississippi River)
- 20 - State Lands
- 21 - Bureau of Reclamation Lands (Fee or Deeded Lands Only)
- 22 - Power Withdrawals and Classification Lands (Shown on reprints of new format maps only)
- 23 - Federal Agency Protective Withdrawals (Shown on reprints of new format maps only)
- 24 - Public Water Reserves (Shown on reprints of new format maps only)
- 25 - Department of Energy (see 27)
- 26 - O&C Lands, Admin. By USFS (shown as USFS color)
- 27 - Radio and Air Facilities (Shown on reprints of new format maps only)
- 28 - Other Federal Lands (FAA, NOAA, etc.)
- 29 - State, County, City, Wildlife, Park & Outdoor Recreation Areas
- 30 - Acquired Lands (Admin. Agency) (Shown on reprints of new format maps only)

D. MAP PLATES NUMBERS - CONTINUED

- 32 - BLM Lettering (Mineral Edition Only)
- 33 - All Minerals
- 34 - Coal Only
- 35 - Oil and Gas Only
- 36 - Oil, Gas, and Coal Only
- 37 - Other Minerals

E. AUTOMATED COLLAR TEXT INFORMATION FORM

8/98

Submitted by: _____ State(s) _____ Date/ _____
 Published Map Name _____ BLM Edition _____

Length of South Neatline (including Extension), straight line to the nearest 1/100 of an inch _____ Extension: Yes ____/No ____

Contour Interval _____ Extension Cont Int _____ Supplementary Contours: Yes ____/No ____;
 Suppl Cont Interval _____

Topo: Lowest Index contour on map (m) _____
 Highest Index contour on map (m) _____

Land Status LegendYes

Public Land _____
 O&C _____
 National Forest _____
 National Grasslands _____
 National Park _____
 Indian Reservation _____
 Military Reservation _____
 Wildlife Refuge _____
 Bankhead-Jones _____
 Patented (Private) X
 State Land _____
 Bureau of Reclamation _____
 Other Federal Lands _____
 State/Cnty/Cty Parks _____

Recreational Symbols Legend

(list in numerical order, using numbers on recreation symbols list)

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.
13.
14.
15.

Mineral Status LegendYes

All Minerals _____
 Coal _____
 Oil & Gas _____
 Oil, Coal, and Gas _____
 Other _____
 No Minerals X

Points of Interest Legend

(list symbols in numerical order, using numbers on the recreation symbols list)

1.
2.
3.
4.
5.
6.
7.
8.
9.

Other - Include with each request the following photocopies:

1. The side center block of the most recent USGS bases. This information should be double checked for accuracy on items such as the adjoining maps section.
2. The correct portion from the USGS 7.5-minute quad index which covers the 100k, and the State map with the 100k coverage so that the box location can be determined.

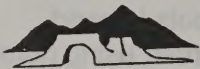
F. COVER PANEL

Pages 14-17 reference this section of the automated collar.

1. SAMPLE COVER PANEL

BLM EDITION 1998
SURFACE MANAGEMENT STATUS
MINERAL MANAGEMENT STATUS

Utah



Cedar City



1:100,000-Scale topographic map showing:

- Highways, roads and other manmade structures
- Water features
- Contours and elevations in meters with conversions to feet
- Recreation sites

Type size of the 100k name will vary based on the length of the name and its relationship to the State Insignia placement (See page 16, #6).

The DOI and BLM emblems will both appear on new and revised 100k's, as well as on reprints with the automated collar format (See page 17, #8).



2. BLM EDITION AND DATE

Other than the dates appearing in the USGS base information block on the center side panel, two dates will appear on the revised map:

The BLM Edition date, which appears at the top of the cover panel. This date is the date of the latest State Office surface/mineral management status revisions to the map.

The USGS/Government Printing Office (GPO) date, which appears below the SW corner of the map body. The USGS/GPO date is the year in which the map has been printed with the most recent changes.

a. State Procedures:

The State Office must sign and date all revision color guides sent to the NARSC (See page 1, A).

b. NARSC Procedures:

Mask the old BLM edition and date, any date that may appear along the lower right hand edge of the map body, and the date below the 100k name in the lower right hand corner from the original #4 BLACK composite plate.

3. SURFACE/MINERAL MANAGEMENT STATUS

a. State Procedures:

Each State will notify the NARSC which status edition(s) of a 100k map is to be revised and printed when the 100k project is submitted to the NARSC.

b. NARSC Procedures:

Mask the old status type from the original #1 BLACK composite.

4. STATE NAME

a. NARSC Procedures:

- 1) Only one State name will appear on the cover panel. The 100k name is derived from a feature located on the specific 100k. The State name shown on the cover panel is the State in which that feature is located. NOTE: The State name shown on the cover panel may not be the State representing the greatest portion of the map.
- 2) The State name is generated by the computer on the #1BLACK collar plate.
- 3) Mask the old State name(s) from the original #6 BROWN contour plate.

5. STATE INSIGNIA

a. Narsc Procedures:

Each State has an insignia which is placed with the DOI and BLM emblems on the collar as a standard design. Insignias are portrayed in BLACK and at an appropriate size to fit properly on the collar.

- 1) The State insignia is generated by the computer on the #1 BLACK collar plate.

6. 100k NAME

a. NARSC Procedures:

- 1) The 100k name is generated by the computer on the #6B BROWN collar plate.
- 2) Mask the old 100k name from the original #6 BROWN contour plate.

7. STATE MAP INSET

a. NARSC Procedures:

- 1) The State map inset placement accommodates the State Insignia and the 100k map name.
- 2) Black outlines of the inset (State shaded relief area) and the specific 100k map are shown on the #1 BLACK collar positive.
- 3) The inset area and the surrounding BROWN shadow area are shown on the #6B BROWN collar positive, with the specific 100k map area shown as a knockout. The inset area is screened 30% biangle in the photo lab on the negative made from the #6B plate.
- 4) For the State Inset BLACK shaded relief layer, place the State Inset positive stickup on the #1 BLACK collar positive, exactly matched to the automated inset outline. Mask the old State Inset from the original #4 BLACK composite.
- 5) Mask the old State inset from the #6 BROWN contour plate.
- 6) Fold line, trim line, and cover panel marks are shown on the #1 BLACK collar positive. On the #10 YELLOW public lands plate open the cover panel to match the box outline on the #1 BLACK collar positive. Be sure open area is clean and free of cut marks. Using litho tape, mask the State inset area of the cover panel on the #10 YELLOW plate to match the State inset outline on the #1 BLACK collar positive.

8. DOI/BLM EMBLEMS

a. NARSC Procedures:

- 1) The DOI/BLM emblems are generated by the computer on the #1 BLACK collar plate.
- 2) Mask the old BLM emblem and the corresponding BROWN strip on the #6 BROWN contour plate.

G. CENTER SIDE PANEL

Pages 18-20 reference this section of the automated collar.

1. SAMPLE CENTER SIDE PANEL

Edited and published by the Bureau of Land Management
National Applied Resource Sciences Center, Denver, Colorado
in cooperation with the Bureau of Land Management
Utah State Office. Planimetry partially revised by BLM
from various source material. Revised information not field
checked.

Base map prepared by the U.S. Geological Survey.
Compiled from USGS 1:24,000-scale topographic
maps dated 1949-1972, and from advance materials.
Partially revised from aerial photographs taken 1976,
1978 and other source data. Revised information not
field checked. Map edited 1982.

Base Information Block
(See page 19)

Projection and 10,000-meter grid, zone 12: Universal
Transverse Mercator. 25,000-foot grid ticks based on
Utah coordinate system, south zone. 1927 North
American Datum.

Vertical Datum Statement
(See page 19)

Land lines are omitted in areas of extensive tract surveys.
There may be private inholdings within the boundaries of
the National or State reservations shown on this map.

National Map Accuracy Standards
Statement
(See page 19)

NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

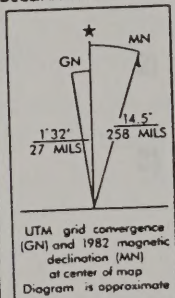
CONVERSION TABLE

METERS	FEET
1500	4921
1750	5741
2000	6562
2250	7382
2500	8202
2750	9022

To convert meters to feet
multiply by 3.2808

To convert feet to meters
multiply by 0.3048

DECLINATION DIAGRAM



ADJOINING MAPS

1	2	3
4		5
6	7	8

1 Wilson Creek Range
2 Wah Wah Mts. So.
3 Beaver
4 Caliente
5 Panguitch
6 Clover Mountains
7 Saint George
8 Kanab

Conversion Table
(See page 20)

Declination Diagram
(See page 20)

Adjoining Maps Diagram
(See page 20)

FOR SALE BY
U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
UTAH STATE OFFICE
SALT LAKE CITY, UT 84145
AND
U.S. GEOLOGICAL SURVEY
DENVER, CO 80225
ISBN 0-607-92198-6



9 780607 921984

"For Sale By" Block
(See page 20)

USGS Printing Office will insert
bar coding directly below the
"FOR SALE BY" Statement. If
BLM State Offices would like
additional information relating to
the bar coding, they should
contact the 100k Production
Supervisor at NARSC.

2. BASE INFORMATION BLOCK

a. NARSC Procedures:

- 1) The first paragraph of the base information block should read: "Edited and published by the Bureau of Land Management National Applied Resource Sciences Center, Denver, Colorado in cooperation with the Bureau of Land Management (specific State) State Office."
- 2) When new bases exist, the base information block from the new bases will be added below the planimetry statement; otherwise, the base information block from the previous map edition is used.
- 3) Delete any existing note referencing predicted shift values at time of an old format reprint, and add the following note. Also use the following note on all replacement maps and at time of revision. Retain the existing note(s) at time of as-is reprint; do not add a new note.

North American Datum of 1927 (NAD 27). Projection and 10,000-meter grid: Universal Transverse Mercator, zone 17. 100,000-foot ticks: North Carolina coordinate system

The values of the shift between NAD 27 and North American Datum of 1983 (NAD 83) for 7.5-minute intersections are obtainable from National Geodetic Survey NADCON software.

- 4) Mask the old base information block from the original #4 BLACK composite plate.

3. VERTICAL DATUM STATEMENT

a. NARSC Procedures:

- 1) This block is taken from the previous map edition.
- 2) Mask the old vertical datum block, which may include a contour interval statement, from the original #4 BLACK composite plate.

4. COMPLIANCE WITH MAP ACCURACY STANDARDS

a. NARSC Procedures:

Mask the old map accuracy statement from the original #4 BLACK composite plate.

5. CONVERSION TABLE DIAGRAM

a. NARSC Procedures:

- 1) Determine the highest and lowest INDEX contours on the map and record them on the Automated Collar Text Information Form.
- 2) Mask the old diagram from the original #4 BLACK composite plate.

6. DECLINATION DIAGRAM

a. NARSC Procedures:

Mask the old declination diagram from the original #4 BLACK composite plate.

7. ADJOINING MAPS DIAGRAM

a. NARSC Procedures:

- 1) Double check the adjoining maps diagram against the USGS Index to Intermediate-Scale Mapping for correct 100k names and spelling.
- 2) Peel the center diagram box in the correct location on the #10 YELLOW public lands plate.
- 3) Mask the old adjoining sheets diagram from the original #4 BLACK composite plate.
- 4) Mask the old center diagram box on the #9 CYAN drainage (if open) and the #10 YELLOW public lands plates.

8. "FOR SALE BY" BLOCK

a. NARSC Procedures:

- 1) If space allows, this block will include the USGS location and all the BLM State Office locations where the specific 100k may be purchased.
- 2) Mask the old For Sale statement from the original #4 BLACK composite plate.

H. TOPOGRAPHIC MAP SYMBOLS PANEL

Pages 21-23 reference this section of the automated collar.

1. SAMPLE TOPOGRAPHIC MAP SYMBOLS PANEL

Topographic Map Symbols

Title (See page 22)

Primary highway, hard surface	
Secondary highway, hard surface	
Light duty, hard, or aggregate surface	
Streets, roads graded/drainage/natural surface	
Rough bladed or two-tracked surface	
Trail (foot, pack, bicycle, or as labeled)	
Route marker: Interstate; U.S.; State	
Railroad: standard gage; narrow gage	
Bridge; overpass; underpass	
Tunnel: road; railroad	
Built up area; locality; elevation	
Airport; landing field; landing strip	
National boundary	
State boundary	
County boundary	
National or State reservation boundary	
Land grant boundary	
U.S. public lands survey; range, township; section	
Range, township; section line, protracted	
Power transmission line; pipeline	
Dam; dam with lock	
Cemetery; building	
Windmill; water well; spring	
Mine shaft; adit or cave; mine, quarry; gravel pit	
Campground; picnic area; U.S. location monument	
Ruins; cliff dwelling	
Distorted surface: strip mine, quarry; gravel pit	
Contours: index; intermediate; supplementary	
Bathymetric contours: index; intermediate	
Stream, lake: perennial; intermittent	
Rapids, large and small; falls, large and small	
Area to be submerged; marsh, swamp	
Land subject to controlled inundation	
Special area boundary	
BLM recreation area boundary	
National trail; back country, scenic byway	

30% BLACK
biangle screen

MAGENTA #5C
(See page 22)

30% BLACK
biangle screen

Legend
(See pages 22)

CYAN stickup
(See page 22)

BROWN #6B
(See page 22)

(.08") 30% BLACK
biangle screen
(.04")
(.05") 30% MAGENTA
biangle screen

NOTE TO MAP USERS

The surface and minerals management status overprints are published as general planning and management tools. Some of the lands, surface and mineral rights, may have been shown as patented lands due to the lack of information available to BLM with respect to the nature of acquisition. Tracts less than 40 acres are usually omitted because of the map scale. The official land records in the respective offices of the Bureau of Land Management or other responsible Federal agencies should be checked for up-to-date status on any specific tract of land. Inadequacies in the BLM maps should be reported to the respective Bureau of Land Management offices from which the maps were obtained.

PUBLIC ACCESS

Roads crossing public lands may be travelled by the public unless closed by signing or notice by the land management agency. Public lands intervened by private lands may not have public access. Permission is required from the private landowner to cross private land, unless access is provided by a Federal, State, or County road, or a BLM road with legal access.

Note to Map Users
(see page 23)

Public Access Note
(see page 23)

2. TITLE

a. NARSC Procedures:

Mask the old title from the original #4 BLACK composite plate.

3. LEGEND

a. NARSC Procedures:

- 1) Symbology at the bottom of the legend shows the road buffer used to highlight BLM Back Country Byways and the National Trail System.
- 2) DO NOT remove any of the tick, fold line, or trim line marks that are on the black collar positives or negatives. These lines need to be removed from the brown and magenta collars after the registration process is completed.
- 3) Mask the old legend from the original #4 BLACK composite and/or the #3 BLACK status/boundary scribe plate.
- 4) The #5C MAGENTA collar plate will contain the road symbology.
- 5) The #6B BROWN collar plate will contain the contour and surface symbology.
- 6) Using an automated legend positive template as a guide:
 - a) Place the negative stickup for the CYAN bridge, dam, dam with lock, water well, spring, bathymetric contours, stream, lake, rapids, falls, area to be submerged, marsh, swamp, and land subject to controlled inundation symbols on the #9 CYAN drainage plate to match the placement of the new legend. Mask the old symbology from the #9 plate.
 - b) Cut a box on the #4A buffer peel that matches the size outlined on the automated legend guide for the Special Area (.08") and BLM Recreation Area (.04") Buffer. If no peel plate, place the positive stickup for the Special Area and BLM Recreation Area screened buffers on the #1 BLACK TYPE positive, aligning the stickup with the miscellaneous boundary lines on the positive.
 - c) Cut a box on the #5B MAGENTA peel that matches the size outlined on the automated legend guide for the BLM Back Country Byway/National Trail Buffer (.05"). The Buffer will be screened in the NARSC Photo Lab.

4. **NOTE TO MAP USERS**

This statement is standard on all BLM 100k maps and is generated by the computer on the #1 BLACK collar plate.

5. **PUBLIC ACCESS NOTE**

This statement is standard on all BLM 100k maps and is generated by the computer on the #1 BLACK collar plate.

6. **COUNTY ROAD NOTE**

a. **State Procedures:**

- 1) States will furnish the NARSC with a stable color guide keyed to the 100k stable base matte mylar with county roads appropriately labeled (See Part III, B2, page 44,45, and B3, pages 47,48).
- 2) Some States do not have a number designation to identify county roads; instead, the county roads may have name designations. When name designations are used for all county roads within a county, include the following note on the revision color guide:
"All named roads in (applicable County) depicted on this map are County roads."

b. **NARSC Procedures:**

When this note is applicable, it appears on the map collar below the Public Access Note, and is generated by the computer on the #1 BLACK collar plate.

PUBLIC ACCESS

Roads crossing public lands may be travelled by the public unless closed by signing or notice by the land management agency. Public lands intervened by private lands may not have public access. Permission is required from the private landowner to cross private land, unless access is provided by a Federal, State, or County road, or a BLM road with legal access.

All named roads in Campbell County are County roads.

I. INDEX TO 1:24,000-SCALE (LARGE SCALE) MAPS

1. NARSC Procedures:

- Use the USGS INDEX TO TOPOGRAPHIC AND OTHER MAP COVERAGE to verify which sheets provide coverage. Coverage to be shown is the most recent source - not what was used to compile the sheet originally.
- When the map has an extension(s), any extension(s) which extends at least one mile beyond the original map neatline will be included on the diagram.
- Digital mapping will not include state-line extensions.*

INDEX TO 1:24,000-SCALE MAPS

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32

- | | | | |
|----|------------------|----|-------------------|
| 1 | Eightmile Spring | 17 | Mount Escalante |
| 2 | Bannion Spring | 18 | Pinon Point |
| 3 | Beryl | 19 | Beryl Junction |
| 4 | Zane | 20 | Newcastle |
| 5 | Avon NW | 21 | Silver Peak |
| 6 | Avon | 22 | Desert Mound |
| 7 | Enoch NW | 23 | Cedar City NW |
| 8 | Enoch NE | 24 | Cedar City |
| 9 | Modena | 25 | Water Canyon Peak |
| 10 | Heist | 26 | Hebron |
| 11 | Yale Crossing | 27 | Enterprise |
| 12 | Clark Farm | 28 | Pinto |
| 13 | Antelope Peak | 29 | Page Ranch |
| 14 | Avon SE | 30 | Stoddard Mountain |
| 15 | The Three Peaks | 31 | Kanarraville |
| 16 | Enoch | 32 | Cedar Mountain |

INDEX TO 1:24,000-SCALE MAPS

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25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40

- | | | | |
|----|---------------------|----|------------------|
| 1 | Shadwater Bay | 17 | Keno |
| 2 | Modoc Point | 18 | Klamath Falls |
| 3 | Swan Lake Point | 19 | Altamont |
| 4 | Sprague River West | 20 | Dairy |
| 5 | Sprague River East | 21 | Bonanza |
| 6 | Beatty | 22 | Lorella |
| 7 | Ferguson Mtn. | 23 | Goodlow Mtn. |
| 8 | Bly | 24 | Gerber Reservoir |
| 9 | Howard Bay | 25 | Hamaker Mtn. |
| 10 | Wacus | 26 | Warden |
| 11 | Whiteline Reservoir | 27 | Lost River |
| 12 | Swan Lake | 28 | Merrill |
| 13 | Yonka | 29 | Maia |
| 14 | Yainax Butte | 30 | Bryant Mtn. |
| 15 | Dry Prairie | 31 | Lange Valley |
| 16 | Horsefly Mtn. | 32 | Brady Butte |
| 33 | Dorris | 37 | Tulelake |
| 34 | Sheepy Lake | 38 | Newell |
| 35 | Lower Klamath Lake | 39 | Carr Butte |
| 36 | Hatfield | 40 | Sagebrush Butte |

J.

SCALE AND ACCOMPANYING LETTERING

1. NARSC Procedures:

- a. When the map includes an extension, and the extension contour interval differs from that on the rest of the map, the contour interval line must include information about both contour intervals.

- 1) No extension

CONTOUR INTERVAL 20 METERS

- 2) With extension

CONTOUR INTERVAL 20 METERS/50 METERS WEST OF 111 00'

- b. When the map shows supplementary contours, the contour interval line must include information about both contour intervals.

- 1) No extension

CONTOUR INTERVAL 20 METERS
SUPPLEMENTARY CONTOUR INTERVAL 10 METERS

- 2) With extension (supplementary contours apply to main map body, not to the extension)

CONTOUR INTERVAL 20 METERS/50 METERS WEST OF 111 00'
SUPPLEMENTARY CONTOUR INTERVAL 10 METERS

- 3) With extension (supplementary contours apply to the extension, not to main map body)

CONTOUR INTERVAL 20 METERS/50 METERS WEST OF 111 00'
SUPPLEMENTARY CONTOUR INTERVAL 25 METERS WEST OF 111 00'

- 4) With extension (supplementary contours apply to main map body and to the extension)

CONTOUR INTERVAL 20 METERS/50 METERS WEST OF 111 00'
SUPPLEMENTARY CONTOUR INTERVAL 10 METERS/
25 METERS WEST OF 111 00'

- c. *Digital mapping will not include state-line extensions.*

- d. Mask the old scale and accompanying lettering on the original #4 BLACK composite plate.

SCALE 1:100,000
CONTOUR INTERVAL 20 METERS
CONTOUR INTERVAL 50 METERS
CONTOUR INTERVAL 10 METERS
CONTOUR INTERVAL 25 METERS

K. LAND STATUS LEGEND

1. NARSC Procedures:

- a. The Land Status Legend is centered on the BLACK collar positive below the 30' mark along the bottom of the map body unless the map has an extension. When the map has an extension, the total horizontal length of the south map body neatline is halved and the legend is centered below the halfway point. The legend is divided into four columns, with four boxes in each column. The boxes are in the same order as the plate numbering system.
- b. Peel the new legend boxes on the original peel plates to reflect the correct location and mask the old boxes.
- c. Mask the old legend from the original #4 BLACK composite plate.

BUREAU OF LAND MANAGEMENT LAND STATUS LEGEND

Public Lands (Administered by Bureau of Land Management).....	NONE	National Forest.....	NONE	National Parks and Monuments.....	NONE	Indian Lands or Reservations.....	NONE
Oregon & California Lands (O&C).....	NONE	National Grasslands.....	NONE	State Lands.....	NONE	Military Reservations and Corps of Engineers.....	NONE
Coast Bay Wagon Road (CBWR).....	NONE	National Wildlife Refuges (Administered by Fish & Wildlife Service).....	NONE	Patented Lands.....		State, County, City, Wildlife, Park and Outdoor Recreation Areas.....	NONE
Bankhead-Jones Land Use Lands (L.U. Lands).....	NONE	Bureau of Reclamation Lands.....	NONE	Other Federal Lands.....	NONE		

MINERAL STATUS LEGEND AND EXTENSION NOTE

1. NARSC Procedures:

- a. The Mineral Status Legend lists all six entries in one column, left justified with the SW corner of the map body.

In general, BLM Public Lands are open to a number of recreational activities in addition to those that may be highlighted on the map. These activities include camping, fishing, hiking and hunting. Certain restrictions may apply. Contact the appropriate BLM State, District or Resource Area Office for more information.

MINERALS OWNED BY THE FEDERAL GOVERNMENT

All minerals ☐

Coal only ☐ NONE

Oil and gas only ☐

Oil, gas and coal only ☐ NONE

Other ☐

No symbol indicates no
Federal minerals ☐

- b. When the map body is extended to the State line, the following note will be added below the SW corner of the map body:

This map contains an extension to the State line.

- c. Make a new #32 minerals lettering plate using the new #1 BLACK negative (made from the #1) with an appropriate mask. Destroy the old #32 plate.
- d. Peel the new legend boxes on the original peel plates (#33-#37) to reflect the correct location and mask the old boxes.

M. MAP BODY

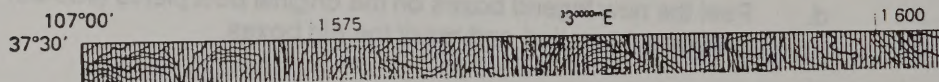
1. 100k MAP NAME IN NW/SE CORNERS

a. NARSC Procedures:

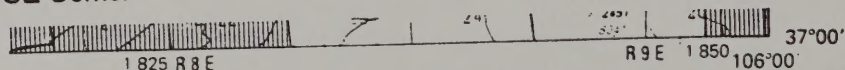
- 1) The 100k name type in these two corners outside the map body normally appears on the original #4 BLACK composite. If the name does not appear on the #4 composite or needs to be added or changed, the type is shown on the #1 BLACK collar positive. A number code (referenced to the SE corner latitude and longitude of the map) is shown below the 100k name in the SE corner of the map.
- 2) Order type according to the following and show on #1 BLACK collar positive:
 - a) 100k name
 - (1) Type style - SOUVENIR MEDIUM, CAPS
 - (2) Type size - 14 pt.
 - b) Locator number below SE corner name
 - (1) Type style - SOUVENIR MEDIUM, CAPS
 - (2) Type size - 10 pt.

NW Corner

ANTONITO, COLORADO-NEW MEXICO



SE Corner



ANTONITO, COLORADO-NEW MEXICO

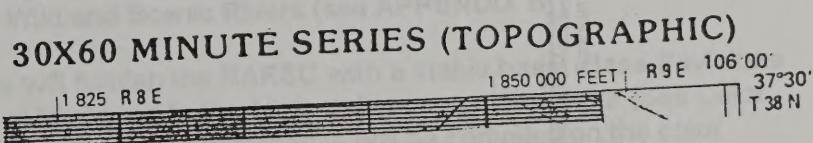
N10600-W3700/30X60

- 3) Place the type horizontally .25" above the North map body neatline and flush with the West map body neatline (for the name in the NW Corner), and horizontally .25" below the South map body neatline and flush with the East map body neatline (for the name in the SE Corner).

2. NE CORNER

a. NARSC Procedures:

- 1) The wording in this corner above the map body is 30 X 60 MINUTE SERIES (TOPOGRAPHY). If the type does not appear on the original #4 BLACK composite or needs to be added or changed, the type is shown on the #1 BLACK collar positive.
- 2) Order the type according to the following and show on the #1 BLACK collar positive:
 - a) Type style - SOUVENIR MEDIUM, CAPS
 - b) Type size - 12 pt.



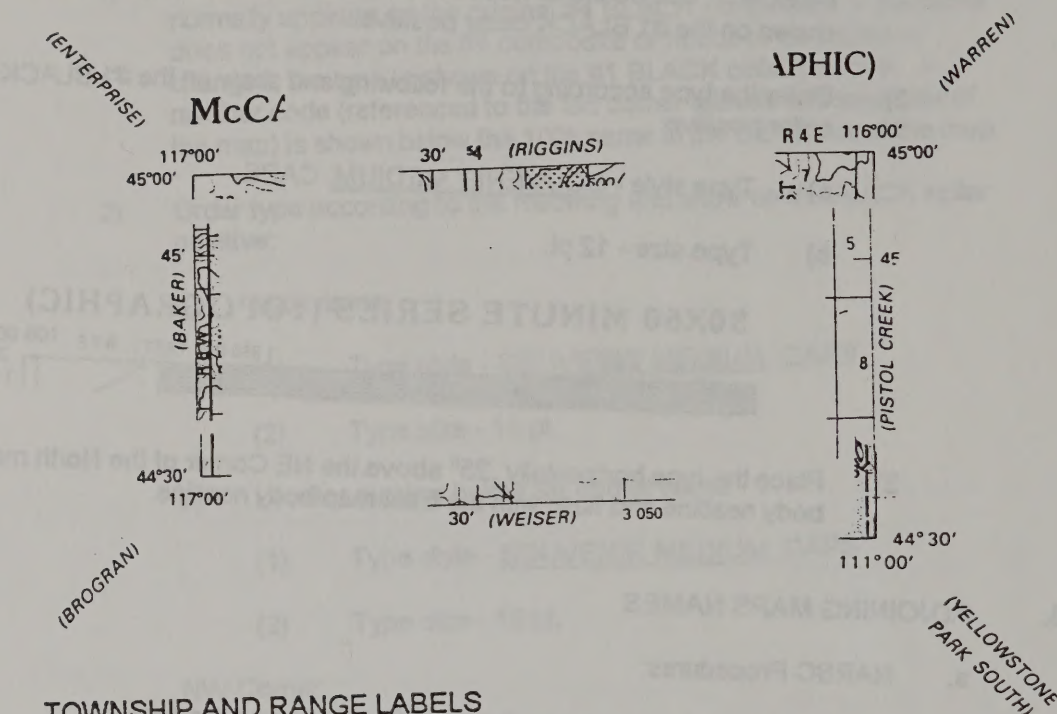
- 3) Place the type horizontally .25" above the NE Corner of the North map body neatline and flush with the East map body neatline.

3. ADJOINING MAPS NAMES

a. NARSC Procedures:

- 1) Order the type, including the parentheses around the names, according to the following and show on the #1 BLACK collar positive:
 - a) Type style - UNIVERS OBLIQUE, CAPS
 - b) Type size - 7 pt.
- 2) Place the type on the #1 BLACK collar positive as follows:
 - a) Names above and below the map body are placed horizontally as close to the 30' mark (the center mark for the neatline) as possible without interfering with the readability of any other type along the map neatlines.
 - b) Names along the East and West neatlines are placed vertically (reading toward the top of the map on both sides of the map) as close to the 45' mark type as possible without interfering with the readability of any other type along the map neatlines.

- c) Corner names are centered along an imaginary diagonal line placed at a 45-degree angle beginning .4" from each map body corner. The two names at the left side corners read into the map body. The two names at the right side corners read away from the map body. If corner name is too long center stack on two lines.



4. TOWNSHIP AND RANGE LABELS

a. NARSC Procedures:

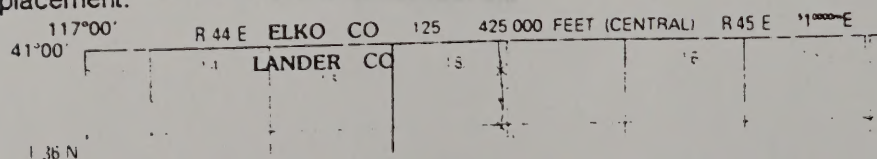
- 1) Order the type according to the following and show on the #1 BLACK collar positive:

a) Type style - UNIVERS CONDENSED, CAPS

b) Type size - 8 pt.

c) Order type with a space between the T or R and the number, and between the number and the direction.

- 2) Place the township and range labels on the #1 BLACK collar positive at .05" (1/20") from the neatline and centered on the township (midpoint) whenever possible (BE CAREFUL TO PLACE STRAIGHT AND LEVEL). Use a background grid for (guidance) type placement.



- 3) Mask the old labels from the #4 BLACK plate.

5. SPECIAL AREA BOUNDARIES AND BUFFER SCREENS

a. State Procedures:

1) The following examples are considered to be Special Areas:

- a) Wilderness Areas
- b) Special Management Areas
- c) Restricted Areas
- d) Areas of Critical Environmental Concern (ACEC)
- e) Scenic Areas
- f) Natural Areas
- g) Primitive Areas
- h) Conservation Areas
- i) Wild and Scenic Rivers (see APPENDIX B)

2) States will furnish the NARSC with a stable base. Base Revisions color guide keyed to the 100k stable base matte mylar (See Color Guide, page 1). The boundaries will be compiled on the color guide using a sharp black pencil (2H or harder lead). The outlines will show the exact alignment of any Special Area boundaries, complete with correct names (shown as area labels). Documentation sources used for the compilation of the boundaries must be listed on the color guide.

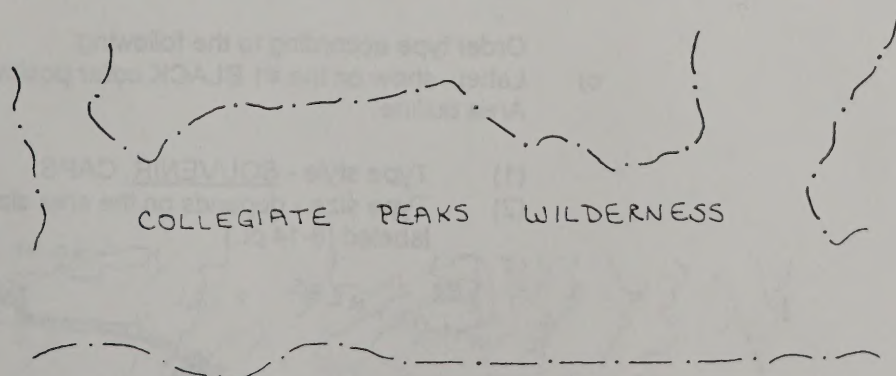
3) State Compilation Specifications

a) Special Area boundary outline

(1) Dash-dot line at outermost limit of Special Area

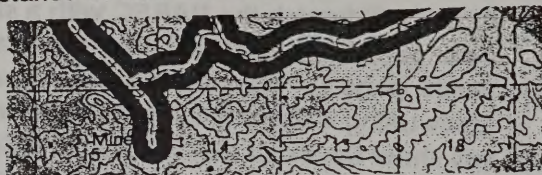
(2) For Wild and Scenic Rivers (WSR), show boundary in aliquot parts when the administering agency shows the boundary that way, otherwise show the boundary 1/4 mile from the river centerline on both sides of the river. This provides a 1/2 mile wide WSR buffer following the course of the river.

b) Label inside area or along river, as appropriate - CAPS.



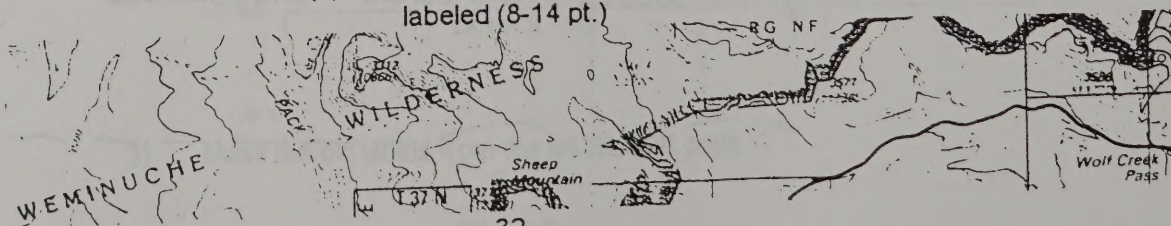
b. NARSC Procedures:

- 1) PLAN AHEAD. Whenever possible, place all Special Area and BLM Recreation Area boundaries on one scribe plate and all Special Area and BLM Recreation Area buffer screens on one peel plate.
- 2) The boundaries and buffer screens for Special Areas are created in ARC/INFO. After boundaries are digitized, a buffer file is created. A scribed miscellaneous boundary plate and a buffer screen peel plate are then generated on the Kongsberg plotter. The boundary scribe plate is labeled #3A; the buffer screen peel plate is labeled #4A. If the boundary is small, or a change is minor, the boundary should be manually scribed on the existing #3 BLACK plate and manually cut the buffer using the scribe as a guide.
- 3) When a wilderness boundary is parallel to a road, the boundary line will be a distance of .025" from the road. This includes cherry stem roads.



4) Color Separation Specifications

- a) Miscellaneous boundary symbol marking the outermost limit of the special area and show on the #3A BLACK negative
 - (1) Lineweight - .007"
 - (2) Dash length - .25"
 - (3) Space - .10"
 - (4) Dot diameter - .01"
- b) Buffer Screen - show on the #4A BLACK peel
 - (1) Buffer width - .08" or 202 meters
 - (2) 30% biangle black screen
- c) Order type according to the following:
 - Label - show on the #1 BLACK collar positive, inside the Special Area outline
 - (1) Type style - SOUVENIR, CAPS
 - (2) Type size - depends on the area size/river length to be labeled (8-14 pt.)



6. STANDARD USGS TOPOGRAPHIC SYMBOLOLOGY

Some features shown in the map body are portrayed using USGS standard symbology for 100k's. These features include:

Adit	Gas Well
Campground	Guzzler
Cave	Lookout
Cemetery	Mine
Cliff Dwelling	Oil Well
Corral	Picnic Area
Ditch	Quarry
Flume	Sandpit
Gaging Station	Water Tank

a. State Procedures:

When adding any of these features on the color guides, place an X in the exact location of the spot feature or a solid black line around the area feature and label the type of feature, including a proper name if there is one.

X Peterson
Campground

□ Cemetery

b. NARSC Procedures:

When adding these features to the map, refer to the USGS 100k specifications (a color copy of these specifications is located in the 100k Production Supervisor's area).

III. INSTRUCTIONS FOR State OPTIONAL FEATURES

The following are the optional features that each State has selected to show on their 100k maps:

Arizona

Additional Drainage Names
Additional Drainage Portrayal
Additional Road Names
BLM Rec Areas/Sites/Trails
#Interior Section Numbers
*Landmark Buildings
Points of Historic Interest
Powerlines/Pipelines
Spot Elevation Conversions

California

Additional Road Names
+Backside Textual Information
BLM Rec Areas/Sites/Trails
#Interior Section Numbers
*Landmark Buildings
*Roads with Public Access
Wells/Windmills

Colorado

Additional Roads
Additional Road Names
*Additional Route Markers(#s)
Backside Textual Information
BLM Rec Areas/Sites/Trails
#Interior Section Numbers
Points of Historic Interest
*Roads with Public Access
Spot Elevation Conversions

Idaho

Additional Roads
BLM Rec Areas/Sites/Trails
#Interior Section Numbers
Powerlines/Pipelines
Spot Elevation Conversions

Montana (ND, SD)

Additional Roads
Additional Road Names
*Additional Route Markers(#s)
BLM Rec Areas/Sites/Trails
#Interior Section Numbers
Spot Elevation Conversions

Nevada

Additional Drainage Names
Additional Drainage Portrayal
Additional Roads
*Additional Route Markers(#s)
+Backside Textual Information
BLM Rec Areas/Sites/Trails
*Fences
*Found Corners
#Interior Section Numbers
Points of Historic Interest
Powerlines/Pipelines
*Roads with Public Access
Ruins
Spot Elevation Conversions
*Triangulation Stations
Wells/Windmills

New Mexico

Additional Road Names
*Additional Route Markers(#s)
BLM Rec Areas/Sites/Trails
#Interior Section Numbers
*Landmark Buildings
Powerlines/Pipelines
Spot Elevation Conversions

Oregon

Additional Drainage Names
Additional Drainage
Additional Roads
Additional Road Names
*Additional Route Markers(#'s)
BLM Rec Areas/Sites/Trails
*Fences
#Interior Section Numbers
*Roads with Public Access
Spot Elevation Conversions
Wells/Windmills

Utah

BLM Rec Areas/Sites/Trails
Points of Historic Interest
*Roads with Public Access
Spot Elevation Conversions
Township Diagram
*Triangulation Stations

Wyoming

Additional Roads
Additional Road Names
*Additional Route Markers(#'s)
+Backside Textual Information
BLM Rec Areas/Sites/Trails
*Roads with Public Access
Township Diagram

*These features are listed in the BLM State-Specific Symbols Legend (See page 36, #2)

This additional feature will not be shown on maps that are compiled using the digital process.

+ Backside textual information is currently used only on Desert Access Guides in California and Arizona.

A. MAP COLLAR INFORMATION

1. TOWNSHIP DIAGRAM

Show for maps in:

Arizona
Oregon (Washington)
Utah
Wyoming (Nebraska)

a. NARSC Procedures:

The Township Diagram is located between the BLM State-Specific Symbols Legend and the Index to 1:24,000-Scale Maps. This is generated by the computer on the #1 BLACK collar plate.

TOWNSHIP DIAGRAM

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

2. BLM STATE-SPECIFIC SYMBOLS LEGEND

Show for maps in:

Arizona
California
Colorado
Idaho
Montana (N. Dakota, S. Dakota)
Nevada
New Mexico
Oregon (Washington)
Utah
Wyoming (Nebraska)

a. NARSC Procedures:

- 1) This legend shows the optional feature symbols selected by a State to appear on their 100k's which are not addressed in the Topographic Map Symbols Legend (see pages 22, #1). The optional State-Specific Symbols that may be listed here include:

Fences
Found Corners
Landmark Buildings
Roads with Public Access

Route Numbers (Markers):
 Bureau of Land Management
 Forest Service
 County
 Triangulation Stations

All maps compiled by the digital process will have route numbers and public access only for state-specific features.





Symbology for these features in the legend and the map body are discussed in Part III, B (See page 43).

- 2) The appropriate features for all States represented on the map are listed in this legend (see asterisked (*) features on page 35). The symbols are NOT listed separately by State. A disclaimer note is shown in BLACK as part of the BLM State-Specific Symbols Legend:

BLM STATE-SPECIFIC SYMBOLS

Due to diverse BLM State Office requirements, unique features have been selected for portrayal in each state. Where a map has coverage in two or more states, the map will portray the optional features selected by the respective State Offices.

Route marker:

Bureau of Land Management.....	
Forest Service.....	
County.....	
Road with Public Access.....	

3. RECREATIONAL SYMBOL LEGEND (INTERNATIONAL SYMBOLS)

Show for maps in:

Arizona
 California
 Colorado
 Idaho
 Montana (N. Dakota, S. Dakota)
 Nevada
 New Mexico
 Oregon (Washington)
 Utah
 Wyoming (Nebraska)

- a. Full Revisions use international symbols to portray recreational activities. Included on pages 39-40 are the international symbols most commonly used on the BLM 100k's.

The symbols used within the map body are defined in this legend and may also appear in the Points of Interest Legend (See page 42, #1).

b. **State Procedures:**

- 1) The number of symbols that can be accommodated in this legend depends on which State the map is located in. Northern tier maps (the States of Washington, Oregon, Idaho, Montana, North Dakota, and South Dakota) can only accommodate one column of symbols in the legend, for a maximum of 12 symbols*. Southern tier maps (the States of California, Nevada, Utah, Wyoming, Colorado, Arizona, and New Mexico) can accommodate two columns of symbols, for a maximum of 20 symbols*.

* The map collar can accommodate a maximum of two columns (one for the BLM Recreational Symbols Legend and one for the Points of Interest Legend) for the Northern tier maps. The map collar can accommodate a maximum of three columns (two columns in one legend and one column in the other legend) for the Southern tier maps. If the State wants to use more symbols than the collar can accommodate, the State should narrow the list of symbols to the number that will fit on the map by prioritizing the symbols that it thinks are the most important to be shown.

- 2) International symbols are shown on both the Surface Management and Mineral Management Editions of the map to reduce excessive printing setup costs.
























c. **NARSC Procedures:**

- 1) When no recreational symbols appear on the map, neither the Recreational Symbol Legend nor the Point of Interest Legend appears on the map.











RECREATIONAL SYMBOLS

The following recreational symbols are the most common symbols used on the BLM 100k maps. These symbols will be used in a negative format as shown below. State Offices should use the exact international symbol descriptions listed in these specifications on the color guides, unless new symbols for activities or facilities not shown here are required.





General

- | | |
|---|--|
|  Amphitheater |  Lookout Tower |
|  Archeological Site |  Other Forest Facility |
|  Bird Viewing Area |  Petroglyphs (Pictograph) |
|  Bird of Prey Viewing Area |  Point of Interest |
|  Desert Tortoise |  Ranger Station |
|  Drinking Water |  Scenic Area |
|  Environmental Study Area |  Scenic Geology |
|  Fee Area |  Visitor Center |
|  Fossil Site |  Wayside Exhibit (Kiosk) |
|  Historic Site |  Wild Horse Viewing Area |
|  Interpretive Sign |  Wildlife Viewing Area |
|  Post Office | |

Water



























- | | |
|---|---|
|  Boat Ramp |  Marina |
|  Canoeing |  Motor Boating |
|  Fishing |  Swimming |
|  Kayaking |  White Water Rafting |
|  Row Boating |  Sailing |

Winter






















- | | |
|--|--|
|  Cross-Country Skiing |  Snowmobiling |
|  Downhill Skiing |  Snowshoeing |

RECREATIONAL SYMBOLS (CONTD.)

Accommodations or Services

 Cabin Rental	 Hospital
 Campfires	 Information
 Campground	 Lodging
 Emergency Radio	 Long-Term Visitor Area
 Emergency Shelter	 Parking
 First Aid	 Picnic Area
 Food Service	 Picnic Shelter
 Gasoline Station	 Restrooms
 General Store	 Showers
 Group Campground	 Telephone
 Group Day Use Area	 Trailer Camping
 Handicapped	 Trailer Sanitary Station
 Hot Tubs	 Trash Collection

Land

 All Terrain Vehicle Trail	 Golfing
 BLM Back Country Byway	 Interpretive Auto Road
 Bicycle Trail	 Interpretive Trail
 Rock Climbing	 Land Sailing
 Dirt Bike Trail	 Mountain Bike Trail
 Four Wheel Drive Trail	 OHV Off Highway Vehicle Area
 Hang Gliding Area	 Playground
 Hiking	 Rock Collecting
 Hunting	 Spelunking
 Equestrian Trail	 Trailhead
 Archery	

5. RECREATIONAL SYMBOL DESCRIPTIONS

The following are descriptive guidelines for some of the preceding symbols:

Bird Viewing Area - general symbol; used when more than one species of bird is being highlighted. Bird viewing areas should be restricted to specific areas where certain bird species have concentrations that are substantially above surrounding areas. Examples of these types of areas might include nesting areas, specific winter ranges, watering sources, or other habitat that acts to concentrate a certain species. When a viewing area highlights a single category of bird (shore, bird of prey, wading, waterfowl, etc.), a viewing symbol for that category may be used.

Boat Ramp - only manmade structures for putting boats, canoes, and rafts in the water

Campground - established campground with at least minimal development

Four Wheel Drive Trail - trail which is suitable for 4WD vehicles

Group Campground - established campground with at least minimal development used for groups

Handicapped - should only be shown at a location where all activities and facilities are handicapped accessible

Information - may include kiosks, information signs, information boxes, etc.

Long-Term Visitor Area - fee area where visitors may stay for extended periods of time. Length of stay permitted may vary from one area to another.

Parking - area established for parking; not just a pull-over shoulder on the side of the road

Picnic Area vs. Picnic Shelter - Picnic area offers no manmade protection from the weather; picnic shelter does have protection from the weather

Point of Interest - spot location of significant interest which cannot be designated in another way

Spelunking - caves open for exploring

Trailhead - If the trailhead has a proper name, it may be labeled on the map. If there are multiple activities and/or facilities at the trailhead (i.e., parking, visitors center, drinking water, restrooms, etc.), the site is numbered on the map and the activities and/or facilities are listed in the Point of Interest Legend (see page 44).

Visitor Center - encompasses all other normal activities associated with a visitors center, i.e., parking, restrooms, information, etc.

Wildlife Viewing Area - general symbol; used when more than one species of animal is being highlighted. Wildlife viewing areas should be restricted to specific areas where certain wildlife species have concentrations that are substantially above surrounding areas. Examples of these types of areas might include nesting areas, specific winter ranges, watering sources, or other habitat that acts to concentrate a certain species. When a viewing area highlights a single species, a viewing symbol for that animal may be used.

6. POINTS OF INTEREST LEGEND









Show for maps in:

Arizona
California
Colorado
Idaho
Montana (N. Dakota, S. Dakota)
Nevada
New Mexico
Oregon (Washington)
Utah
Wyoming (Nebraska)

a. NARSC Procedures:

- 1) Full Revisions incorporate the use of recreational international symbols. The information for this legend is extracted from the color guide received from the State showing Points of Interest information (See pages 49, #5). Activities and facilities for each site should be listed alphabetically. All sites that have the exact same activities and services should be designated with the same number.

POINTS OF INTEREST LEGEND

1				
2				

- 2) When there are no recreation sites or areas on the map or they do appear but do not require the use of international symbols, the Points of Interest Legend does not appear on the map collar.

B. MAP BODY INFORMATION

1. ADDITIONAL DRAINAGE PORTRAYAL AND DRAINAGE NAMES

Show for maps in:

Arizona
Nevada
Oregon (Washington)

a. State Procedures:

- 1) States will furnish the NARSC with a stable base color guide keyed to the 100k stable base matte mylar. Drains will be compiled with a sharp black pencil (2H or harder lead) either photogrammetrically within + or - 169 feet (National Map Accuracy Standards) or paneled to the matte mylar from 1:24,000 quadrangles. States should be aware that severe drainage revisions/additions may affect contours. Contours should be revised in those areas using brown pencil, making sure that turnbacks hit drainage in appropriate place. Added names should be verified with the Board of Geographic Names (USGS) and labeled in blue, on the color guide (See page 73, Instructions for Name Changes and Name Additions).
- 2) State Compilation Specifications
 - a) Sharp black pencil line
 - b) Drains and lakes need to be labeled individually as perennial, intermittent, or dry.
 - c) Labeled in blue:
 - (1) CAPS: for lakes larger than 4 inches across at their widest point; and double line drains 200 ft. or wider.
 - (2) CAPS and Lowercase: for lakes less than 4 inches across at their widest point; and single-line drains less than 200 feet wide.

b. NARSC Procedures:

- 1) Scribe, digitize, or scan the drains at the prescribed lineweights (CYAN SCRIBE labeled #9A) and add drainage names on the #9B CYAN TYPE positive. Create a peel plate for any open water areas. The CYAN open water plate is labeled #9C. If open water areas are small, add open water screen to the plate. The photolab will screen large/extensive areas of open water.

2) Color Separation Specifications

a) Drainage lineweights

- (1) Perennial streams - .008"
- (2) Intermittent - .004"
- (3) Measure scribe lineweights across the #9 CYAN drainage plate. When drainage lineweights on the #9 CYAN plate differ from those referenced above, lineweights will match those used on the #9 CYAN plate.

Order type according to the following and show on the #1 BLACK collar positive:

b) Drainage label

- (1) Type style - SOUVENIR LIGHT ITALIC, CAPS or CAPS/Lowercase
- (2) Type size - dependent on the size of feature. Refer to 1:100k-Scale Type Guide.

2. ADDITIONAL TRAILS, BYWAYS, BACKWAYS, AND ROADS

Show for maps in:

Arizona
California
Colorado
Idaho
Montana (ND, SD)
New Mexico
Nevada
Oregon (WA)
Utah
Wyoming (NE)

a. State Procedures:

- 1) States will furnish the NARSC with a stable base color guide keyed to the 100k stable base matte mylar. Roads will be compiled with a sharp, hard pencil from photogrammetric methods within + or - 169 feet (National Map Accuracy Standards) or paneled to the matte mylar from 1:24,000 quadrangles. Added roads should tie into the existing road network. Roads shorter than 1/2 inch should be omitted unless connecting existing roads or showing access to BLM land through private or other agency land. When a bicycle trail is coincident with a higher classified road, the road symbol remains and the bike trail is only labeled, not shown.

- 2) Additional roads may include roads deleted through generalization from the 1:24,000 quadrangles, new roads, and existing roads which have changed in classification. Also check Appendices A and C of these specifications for any BLM Back Country Byways and/or trails in the National Trail System which should appear on specific 100k's. The addition of roads will be consistent throughout the State.
- 3) State Compilation Specifications
 - a) States will furnish the NARSC with a stable base color guide keyed to the 100k stable base matte mylar. Roads will be clearly labeled with black pencil in CAPS, along compiled roads.
 - b) Named roads will include only ORV roads, OHV roads, Scenic Routes, Historic trails, and trails in the National Trail System (scenic, historic, and recreation). BLM Back Country and Scenic Byways are included (See Appendix A). See Appendix C for a list of scenic and historic trails in the National Trail System. Refer to the National Park Service's Register of National Recreation Trails, January 1993, for a list of recreation trails in the National Trail System.
 - c) Named roads must be at least 2 miles in length with adequate room for type readability on the printed map.
 - d) Roads will be identified by class:
 - 1) class 1 - black
 - 2) class 2 - red
 - 3) class 3 - green
 - 4) class 4- orange
 - 5) class 5 - purple
 - 6) Trails - turquoise, label with primary use of trail (if not labeled, the trail is assumed to be 4WD)

NOTE: Staedtler/Mars plastic drafting lead is available in many colors and holds an acceptable lineweight for compilation purposes and is recommended by the NARSC.

b. NARSC Procedures:

- 1) PLAN AHEAD. Whenever possible, place all MAGENTA road buffers for BLM Back Country Byways and National Trails on one peel.

- 2) Reference the sample Topographic Map Symbols Legend on page 21 for road classification definitions and trail labeling.
- 3) Measure lineweights across the #5 MAGENTA road plate. When lineweights on the #5 MAGENTA plate differ from those referenced, lineweights will match those used on the #5 plate.
- 4) Roads and trails that are designated as BLM Back Country Byways (see Appendix A) are shown with a buffer screen, a label and a BLM Back Country Byway symbol at each end of the trail/map edge.
- 5) Roads and trails that are designated as part of the National Trails System (see Appendix C), or as Federal or State scenic byways, are shown with a buffer screen and a label. If all or part of the trail is labeled as indefinite, it is included as part of the road label, and placed after the trail name in parentheses.
 - a) The Buffer screen is created in ARC/INFO. A peel plate is the generated on the Kongsberg plotter. The MAGENTA buffer peel is labeled #5b.
- 6) Roads that are not part of the BLM Back Country Byway, National Trails, or Federal or State Scenic byway systems, may be labeled if they are at least 2 miles in length and there is sufficient room for a road label.
- 7) Order type according to the following and show on the #1 BLACK collar positive:
 - a) Type style - UNIVERS OBLIQUE, CAPS
 - b) Type size - 6 pt.
- 8) Color Separation Specifications -
 - a) Class 1 - .025" lineweight (with 30% black biangle screen)
 - b) Class 2 - .015" lineweight (with 30% black biangle screen)
 - c) Class 3 - .012" lineweight
 - d) Class 4 - .007" lineweight
 - e) Class 5 -
 - (1) .007" lineweight
 - (2) dash - .05"
 - (3) space - .02"

f) Trail -

- (1) 007" lineweight
- (2) dash - .05"
- (3) space - .02"
- (4) label - primary use of trail
type style - UNIVERS OBLIQUE, CAPS
type size - 6 pt.

g) Buffer screen - show on #5B MAGENTA peel

- (1) buffer width - .05"
- (2) 30% MAGENTA biangle screen

9) Dash roads on the scribe plate or negative.

3. ADDITIONAL ROUTE MARKERS (NUMBERS)

Show for maps in:

Arizona
California
Colorado
Idaho
Montana (N. Dakota, S. Dakota)
Nevada
New Mexico
Oregon (Washington)
Utah
Wyoming (Nebraska)

a. State Procedures:


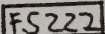


- 1) States will furnish the NARSC with a stable base color guide keyed to the 100k stable base matte mylar. Route markers will be compiled with a sharp black pencil (2H or harder lead) in the following manner:

- a) BLM route markers - BLM roads are those roads on public lands designated with numbered BLM road signs. BLM route marker information should be compiled from BLM documentation.

- b) Forest Service route markers - Forest Service roads are roads within National Forests which are designated with numbered Forest Service road signs. National Forest trails that have been assigned numbers will NOT be shown with route markers. Forest Service route markers should be compiled from Forest Service documentation.
- c) County route markers - County roads are only those roads which traverse private lands which are designated with numbered County road signs. County route marker information should be compiled from county documentation.
- d) Indian Reservation route markers - Indian Reservation roads are roads within Indian Reservations which are designated with numbered Indian Reservation road signs.

2) State Compilation Specifications -

- a) Numbered route markers will be shown as follows and labeled linearly along roads to make identification clear as to which road is being labeled. All numbered BLM, Forest Service, and County roads will be labeled with route markers according to the following specifications.

BLM	FOREST SERVICE	COUNTY	INDIAN RESERVATION
			

b. NARSC Procedures:

- 1) Check the map body for color. If USGS base route markers are currently MAGENTA, change all route markers to BLACK.
- 2) In addition to standard USGS route markers, additional BLM, Forest Service, and County route markers will be shown.
- 3) All route markers are shown on the #1 BLACK collar positive:
 - a) Interstate, U.S., and State Highway symbols are available in the Cartography Lab type file.
 - b) BLM, Forest Service, Indian Reservation and County route markers are created using Microstation software.
 - c) Place route markers on the #1P BLACK collar positive linearly along the applicable road segment so that road identification is clear (See Type Placement Handout).

4. BACKSIDE TEXTUAL INFORMATION

Show for maps in:

California
Colorado
Nevada
Wyoming (Nebraska)

NOTE: As format and procedures are developed they will be added to these specifications.

5. RECREATIONAL SYMBOLS

Show for maps in:

Arizona
California
Colorado
Idaho
Montana (N. Dakota, S. Dakota)
Nevada
New Mexico
Oregon (Washington)
Utah
Wyoming (Nebraska)

The following standard note is shown below the lower left neatline of the map:

In general, BLM Public Lands are open to a number of recreational activities in addition to those that may be highlighted on the map. These activities include camping, fishing, hiking, and hunting. Certain restrictions may apply. Contact the appropriate BLM State, District, or Resource Area Office for more information.

This note is generated by the computer on the #1 BLACK collar plate.

a. State Procedures:

States will furnish the NARSC with a stable base color guide keyed to the 100k stable base matte mylar with BLM and other recreation sites, areas, and trails appropriately labeled.

b. Points of Interest:

- 1) International symbols will only be used to highlight sites, trails, and areas of outstanding recreational value. These are usually specially-managed areas.
- 2) A list of the most common Recreational symbols used on BLM 100k's is shown on pages 39-40. When naming an activity not on this list, include the source for the international symbol on the color guide and a photocopy of the symbol.
- 3) BLM Recreation and other Special Management Areas that are large enough, are shown with a miscellaneous boundary and a 30% BLACK biangle screened buffer on the map.
- 4) Recreation Sites are shown on the map with a label. When there are highlighted activities/facilities at the site, the site is labeled with either a numbered recreation site symbol (multiple activities/facilities) or a specific international symbol (single activity/facility).
- 5) BLM Back Country Byways (BCBs) are shown on the map with a BLM BCB symbol at each end of the Byway, and highlighted with a 30% MAGENTA buffer the length of the Byway.
- 6) Historic, scenic, and recreation trails that are part of the National Trail System (See Appendix C), or are a federal or state scenic byway, are highlighted on the map with a 30% MAGENTA buffer and labeled.
- 7) Other trails are labeled with the proper trail name.

c. State Compilation Specifications

Complete, accurate information must be provided by the State Offices for all recreational sites and areas. Boundaries will be shown only for officially-recognized areas. Specifically indicate all activities and facilities, including handicap accessibility. State the officially-recognized name of the site or area. If possible, please provide the NARSC with any official brochures for the site or area. Appropriate personnel should verify all recreation activities and facilities.

1) BLM Recreation and Special Management Areas

Use a sharp black pencil (2H or harder lead) to outline Areas on the base color guide and label according to the following specifications:

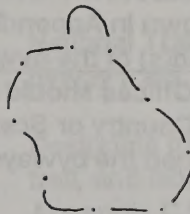
a) Miscellaneous boundary

Dash length - .25"

Space - .10" on each side of dot

Dot diameter - .01"

b) Label - CAPS



SNOWY MOUNTAIN
RECREATION AREA

CROSS COUNTRY SKIING
DOWNHILL SKIING
WINTER RECREATION AREA

2) Recreation Sites

Use a sharp black pencil (2H or harder lead) to designate specific Sites (which may or may not be within a Recreation Area) and Recreation Areas too small to show with a miscellaneous boundary, by placing an X in the exact location on the base color guide, labeling with the site or area name, and indicating the highlighted activities and/or facilities found at each site or area.

X CLEAR LAKE RECREATION SITE
PICNIC AREA
BOAT RAMP
SAILBOATING

3) BLM Trails (and other agency-maintained trails)

Following the State compilation specifications on pages 45-48, and the guidelines below, use a sharp hard pencil to compile BLM recreational trails:

a) Back Country Byways

Appendix A of these specifications lists designated BLM Back Country Byways. Plot the byway on the base color guide using the correct symbology (See page 47-48). When any portion of the trail coincides with a road already shown on the map, that portion of the trail will be shown using the higher road classification. Example: class 3 takes precedence over classes 4-5 and trails. Label the byway exactly as shown in Appendix A, and use bar tacks to mark the end(s) of the byway if within the map body. The State Offices should notify the NARSC of new BLM Back Country or Scenic Byways, not on the current list, when the byways are officially designated.

SEMINOLE TO ALCOVA NATIONAL BACK COUNTRY BYWAY

b) Other maintained, named BLM, FS, and NPS trails

Show label along the trail, primary use of the trail, and use bar tacks to mark the end(s) of the trail within the map body. When any portion of the trail coincides with a road already on the map, that portion of the trail will be shown using the higher road classification. Example: classes 1-5 take precedence over the trail symbology.

MOCKINGBIRD MESA TRAIL MOUNTAIN BIKING

c) BLM trailheads

Place an X at the exact location of the trailhead, and label with the trailhead name. The trail will also be labeled. Use bar tacks to mark the end(s) of the trail within the map body. If there are recreational activities/facilities located at the trailhead, list these next to the X.

BUENA VISTA RIVER PARK TRAILHEAD

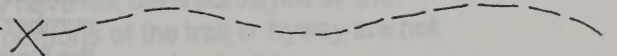
PARKING
DRINKING WATER

X COLORADO MIDLAND BIKE TRAIL

d) Unnamed trails

- 1) When a trail is unnamed, follow the specifications for road classification: trails, page 45 (see d6).
- 2) When a trailhead has no name but has one or more activities/ facilities mark the location of the trailhead with an X and list the activities/facilities.

PARKING
DRINKING WATER
PICNIC AREA



e) National Trail System, and Federal and State scenic byway trails

Designate trail by using bar tacks at each end of the trail, and labeling the trail with the official name (See Appendix C for list of National Trail System trails).

f) Trailheads will be shown.

d. NARSC Procedures:

- 1) PLAN AHEAD. Whenever possible, place all Special Area and Recreation Area boundaries on one scribe plate and all Special Area and Recreation Area buffer screens on one peel plate.
- 2) Recreation Areas and other Special Management Areas are shown with a miscellaneous boundary symbol, a buffer screen, and a label.
- 3) The boundaries and the buffer screens for Recreation and other Special Management Areas are created in ARC/INFO. A miscellaneous boundary scribe plate and a buffer screen peel plate are then generated on the Kongsberg plotter. The boundary scribe plate is labeled #3A or #3B. The buffer screen peel plate is labeled #4A or #4B. If the boundary is small, or changes are minor, the boundary should be manually scribed and the buffer digitized or manually cut using the scribe as a guide. Special Management Areas have a .08" buffer and BLM Recreation Areas have a .04" buffer.
- 4) Points of Interest boundaries, labels, and symbols will be placed according to these specifications and Part B of the Type Placement Handout.

- 5) Recreation Sites, which may or may not be within a Recreation Area, and Recreation Areas that are too small to be shown with a boundary are shown as follows:

- a) Single highlighted activity or facility at location: Place the appropriate international symbol on the map at the marked location, and add a label when a name for the site or area is provided.



Cardwell
Recreation Site

- b) Multiple highlighted activities and facilities at location: Place a numbered recreation site symbol at the marked location. The number and the associated international symbols are shown in the Points of Interest Legend.



Five Points
Recreation Site

- c) When a specific group of highlighted activities/facilities applies to more than one recreation site or recreation area, the same numbered recreation site symbol is used in all cases within the map body, and listed only once in the Points of Interest Legend. (This does not apply when backside text is used for each area on the 100k.)



Bear Trap
Recreation Site



Red Mountain
Recreation Site

- 6) BLM Recreational Trails

- a) BLM Back Country Byways

- (1) Appendix A lists designated BLM Back Country Byways (BCBs). All BLM BCBs are shown with a 30% MAGENTA biangle buffer screen, road label, and BLM BCBs symbols.

- (2) A byway may include more than one road classification along its length. Referencing these specifications for additional roads on pages 44,45, scribe any portions of the byway, not already portrayed on the #5 MAGENTA road plate, on the #5A MAGENTA scribe plate.

- (3) When any portion of the byway coincides with a road already on the map, that portion of the byway using the higher road classification takes precedence. Example: class 3 takes precedence over classes 4-5 and trails.

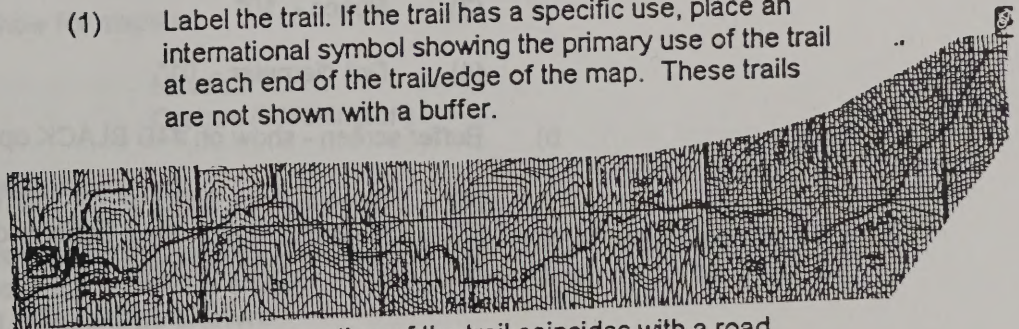
- (4) Label the byway as shown in Appendix A and place a BLM Back Country Byway symbol at each end of the trail/edge of map.

b) National Trail System and Federal / State Scenic Byway / Trails

- (1) Appendix C lists designated trails in the National Trails System. These trails and Federal/State scenic byways are shown with a .05" and 30% MAGENTA biangle buffer screen and are labeled.
- (2) These trails and byways may include more than one road classification along its length. Sometimes portions of the trail or byway have not been portrayed on the base map. Where portions of the trail or byway are not portrayed, only the buffer screen is shown.
- (3) When any portion of the trail or byway coincides with a road already on the map, that portion of the trail or byway using the higher road classification takes precedence. Example: class 3 takes precedence over classes 4-5 and trails.
- (4) If all or part of the trail or byway is labeled as indefinite, it is included as part of the road label and placed after the trail name in parentheses.

c) Other named BLM trails

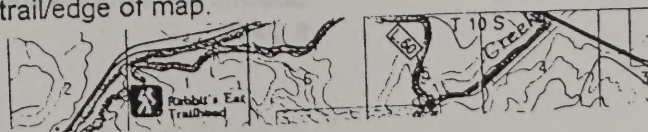
- (1) Label the trail. If the trail has a specific use, place an international symbol showing the primary use of the trail at each end of the trail/edge of the map. These trails are not shown with a buffer.



- (2) When any portion of the trail coincides with a road already on the map, that portion of the trail will be shown using the higher road classification and the label will be centered linearly along the length of the trail. Example: Classes 1-5 take precedence over the trail symbology.

d) Trailheads

- (1) If a trailhead is named, label the trailhead and the trail, and place an trailhead symbol at each end of the trail/edge of map.



d) Trailheads

- (1) If a trailhead is named, label the trailhead and the trail, and place an trailhead symbol at each end of the trail/edge of map.
- (2) When there are multiple activities/facilities at the trailhead, place the number symbol at the trailhead location. The number symbol and international symbols (including the primary use of the trail) will be shown in the Points of Interest Legend (See page 42, #6).

e) Unnamed trails

- (1) When a trail is unnamed, use a trailhead symbol only.

7) For Non-BLM trails, See page 46, #6, and page 47 (f)Trail).

8) Color Separation Specifications

a) Miscellaneous boundary - delineates the outermost edge of the recreation area; show on #3A or #3B BLACK scribe plate.

- (1) Lineweight - .007"
- (2) Dash length - .25"
- (3) Space - .10"
- (4) Dot diameter - .01"

b) Buffer screen - show on #4B BLACK open window peel.

- (1) Special Area Buffer width - .04" or 202 meters
- (2) BLM Recreation Area Buffer width - .02" or 101 meter
- (3) 30% BLACK biangle screen

c) Recreation area label - show on #1 BLACK collar positive.

- (1) Type style - SOUVENIR, CAPS/Lowercase.
- (2) Type size - will vary depending on size of recreation area.

d) International symbols - show on #1 BLACK collar positive.

Specific site symbols are placed using the State color guide as a guide.

- e) National Trail System trail or Federal/State scenic byway label - show on #1 BLACK collar positive.
 - (1) Type style - UNIVERS OBLIQUE, CAPS
 - (2) Type size - 6 pt.
- f) BLM Back Country Byway and Maintained BLM trail labels - show on #1 BLACK collar positive
 - (1) Type style - UNIVERS OBLIQUE, CAPS
 - (2) Type size - 6 pt.
- g) Named trailhead label - show on #1 BLACK collar positive
 - (1) Type style - SOUVENIR, CAPS/Lowercase
 - (2) Type size - 6 pt.
- h) Primary use of unnamed trail label - show on #1 BLACK collar positive.
 - (1) Type style - UNIVERS OBLIQUE, CAPS
 - (2) Type size - 6 pt.

6. FENCES

Show for maps in:

Nevada
Oregon (Washington)

a. State Procedures:

- 1) Only major fence lines that are pertinent to BLM administrative boundaries will be shown. No fence lines shorter than 80 chains (1 mile) will be shown.
- 2) States will furnish the NARSC with a stable base color guide keyed to the 100k stable base matte mylar. Fences may be compiled in either of two ways:

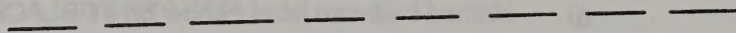
- a) Compile fences photogrammetrically within + or - 169 feet (National Map Accuracy Standard).

OR

- b) Send the thirty-two 1:24,000-scale USGS topographic maps that cover the 100k to the NARSC with the base revision color guide with the appropriate fences highlighted.

3) State Compilation Specifications

Use a sharp black pencil (2H or harder lead) to designate fencelines with a dashed line as follows:



b. NARSC Procedures:

- 1) PLAN AHEAD. Whenever possible, place all fencelines, found corners, triangulation stations, pipelines, and powerlines on one film positive.
- 2) Digitize fencelines in Microstation if the State has compiled the fences at the 100k scale. A film positive is then generated on the Kongsberg plotter. The fenceline/found corner plate is labeled #4F.
- 3) Digitize fencelines in ARC/INFO if capturing from the 1:24,000-scale USGS topographic maps, then output to Microstation to add X's to fencelines. A film positive is then generated on the Kongsberg plotter. The fenceline/found corner plate is labeled #4F.
- 4) When fencelines are coincident with status, section, township/range, or miscellaneous boundary lines, opaque the fenceline but leave in the fence ticks over the existing linear symbol. If they are not coincident, both the fencelines and the ticks are portrayed, overlapping the status, section, township, range, or miscellaneous boundary lines where applicable.
- 5) Color Separation Specification - show on the #4F FENCE positive plate
 - a) Lineweight - .003"
 - b) Crossbuck - .075" x .075"
 - c) Spacing between crossbucks - .3"

7. FOUND CORNERS

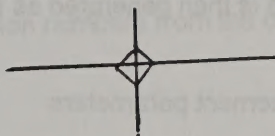
Show for maps in:

Nevada

a. State Procedures:

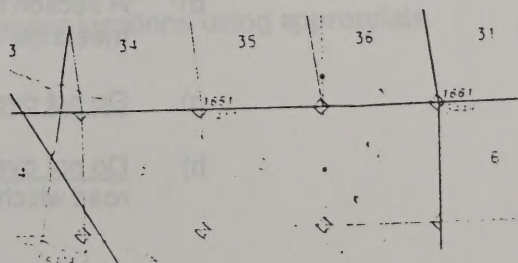
- 1) States will furnish NARSC with a stable base color guide keyed to the 100k stable base matte mylar. Symbology will be compiled with a sharp black pencil (2H or harder lead). Changes in cadastral surveys should be taken into account.
- 2) USGS defines a found corner as a corner which has been monumented and field identified at some point in time. A found corner is shown on the USGS 1:24,000-scale series as a red cross at the .010" lineweight. Offset corners are found corners shown on the USGS 1:24,000-scale series as described above. Offset corners are labeled as either meander or witness corners. An indicated corner is also shown as a red cross on the USGS 1:24,000-scale series, but at a .005" lineweight. Indicated corners are NOT considered to be found corners.
- 3) State Compilation Specifications

Found corners will be shown with a black open diamond at the exact position.



b. NARSC Procedures:

- 1) PLAN AHEAD. Whenever possible, place all fencelines, found corners, triangulation stations, pipelines, and powerlines on one film positive.
- 2) Digitize found corners in Microstation. The found corner/fence film positive is then generated on the Kongsberg plotter. The plate is labeled #4F.
- 3) Color Separation Specifications - show on the #4F FENCE positive plate
 - a) .06" x .06" square
 - b) Lineweight - .006"



8. INTERIOR SECTION NUMBERS

Show for maps in:

Arizona
California
Colorado
Idaho
Montana (N. Dakota, S. Dakota)
Nevada
New Mexico
Oregon (Washington)

All maps compiled using the digital process, will not show interior section numbers.

a. NARSC Procedures:

- 1) Make all necessary changes (including extensions where applicable) to plates #1 through #9, including new lettering positives, peels, and scribes, based on the information compiled on the State revision color guides.
- 2) Use Microstation to digitize section numbers. The section number plate is then generated as a paper plot on the Kongsberg plotter.
- 3) Placement parameters
 - a) Section numbers are placed in the center of the section whenever possible.
 - b) When type is present in the center of the section, the section number is moved to the next closest open area (See Type Placement Handout).
 - c) A section not defined by more than 3 section lines, does not receive a section number, unless the surrounding area is completely sectioned (numbered), or a part of the fourth line exists.
 - d) A section that is protracted receives a section number if it meets the above criteria.
 - g) Do not overprint section numbers on any color type.
 - h) Do not overprint section numbers on any primary or secondary road which has a BLACK screen or on roads with public access.

- l) Do not overprint section numbers on the BLACK boundary buffer screens.
 - j) Do not overprint section numbers on any BLACK spot features, i.e., buildings, windmills, triangulation stations, etc.
 - k) Section numbers may be overprinted on status lines.
- 4) The section numbers are carefully edited and corrected using the paper plot as a guide. In most cases, this should be the only paper edit of section numbers. Errors found on the section number plate (either positive or negative) can be fixed at any stage in the process with positive or negative unscreened stickup.
 - 5) After the paper plot has been used to make corrections to the Microstation section number file, a film positive is generated on the Kongsberg plotter. This plate is labeled #4S. The negative made from the film positive is also labeled #4S.
 - 6) The film positive is duplicated as a negative and screened at 50% when the final composites are produced, eliminating the use of a second generation screened composite.
 - 7) Mask old corner section numbers from the original #4 BLACK composite plate.

9. LANDMARK BUILDINGS

Show for maps in:

Arizona
California
New Mexico

a. State Procedures:

- 1) States will furnish the NARSC with a stable base color guide keyed to the 100k stable base matte mylar, with Landmark Buildings (LMBs) placed in proper locations using appropriate symbology and labeled.

- 2) Landmark buildings, as defined by USGS, are such institutions as Universities, Colleges, and Hospitals; administration buildings; and other buildings such as isolated, large ranches, schools, ranger stations, guard stations, and churches and community halls which are of particular importance because of their value as reference points. A landmark building is one that is conspicuous because of its size, shape, height, position, isolated location, or unusualness to an area.

- 3) Identify ALL landmark buildings with a proper name or type of building label.

- 4) State Compilation Specifications

Solid black square shown in correct alignment and labeled in black letters in CAPS/Lowercase.

■ Star School ■ School ■ Ranch

b. NARSC Procedures:

- 1) Color Separation Specifications

- a) LMB symbol - Use stickup of the standard USGS 100k LMB symbol. If the LMB is larger than the minimum size referenced in these specifications, scribe the LMB on the #3 BLACK scribe plate as follows:

- (1) .02" x .02" minimum (or) to scale
(2) Solid black fill

Order type according to the following and show on the #1 BLACK collar positive:

- b) Label

- (1) Type style - SOUVENIR, CAPS/Lowercase
(2) Type size - 6 pt.

- 2) LMB symbols will be placed on the #3 BLACK scribe plate and labeled on the #1 BLACK collar positive, using the State color guide for placement.

10. HISTORIC SITES

Show for maps in:

Arizona
Colorado
Nevada
Utah

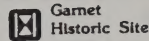
a. State Procedures:

A historic site is designated by placing an X at the exact location on the color guide and labeling it as a historic site, including a proper name when applicable.

X Garnet
Historic Site

b. NARSC Procedures:

- 1) A historic site is shown with a historic site international symbol and a label when specified.



- 2) Order type according to the following and show on the #1 BLACK collar positive:

a) Label - show on the #1 BLACK collar positive

- (1) Type style - SOUVENIR, CAPS/Lowercase
- (2) Type size - 6 pt.

11. POWERLINES AND PIPELINES

Show for maps in:

Arizona
Idaho
Nevada
New Mexico

a. State Procedures:

- 1) States will furnish NARSC with a stable base color guide keyed to the 100k stable base matte mylar, with correct placement of these features compiled photogrammetrically within + or - 169 feet (National Map Accuracy Standards) or paneled to the matte mylar from 1:24,000 quadrangles.
- 2) Powerlines/pipelines less than 1 mile in length will not be shown on the map.
- 3) Common sense should be used when showing numerous powerlines/pipelines that run parallel to roads or other linear features. When the portrayal of powerlines/pipelines running parallel to roads adds clutter to the map, road portrayal will take precedence.
- 4) State Compilation Specifications
 - a) Use a sharp black pencil (2H or harder lead) to compile features.
 - b) Powerlines - Will be shown with a black line with dots every .50".
 - c) Pipelines - Will be shown with a black line.
 - d) Powerlines and Pipelines are labeled with text in CAPS

POWERLINES



PIPELINES

ABOVEGROUND PIPELINE

b. NARSC Procedures:

- 1) PLAN AHEAD. Whenever possible, place all fencelines, found corners, triangulation stations, pipelines, and powerlines on one film positive.
- 2) Powerlines/pipelines less than 1 mile in length will not be shown on the map.
- 3) When the portrayal of powerlines/pipelines running parallel to roads adds clutter to the map, road portrayal will take precedence.
- 4) Digitize powerlines and pipelines in Microstation. A film positive is then generated on the Kongsberg plotter. The plate is labeled #4F.
- 5) If there are only a few powerlines/pipelines to be added, scribe them on the #3 BLACK status/ boundary scribe plate and label where appropriate.
- 6) Color Separation Specifications
 - a) Powerlines - scribe on #3 BLACK plate
 - (1) Lineweight - .003"
 - (2) Solid black square - .017" x .017"
 - (3) Spacing of squares - .50"
 - b) Pipelines - scribe on #3 BLACK plate
 - (1) Lineweight - .005"
 - (2) ABOVEGROUND PIPELINE label - show on #1P BLACK TYPE positive

Order type according to the following and shown the #1 BLACK collar positive:

- (a) Type style - UNIVERS OBLIQUE, CAPS
- (b) Type size - 6 pt.

12. ROADS WITH PUBLIC ACCESS

Show for maps in:

California
Colorado
Nevada
Oregon (Washington)
Utah
Wyoming (Nebraska)

a. State Procedures:

- 1) States will furnish the NARSC with a stable base color guide keyed to the 100k stable base matte mylar with the appropriate roads highlighted with a yellow highlighter pen. Care should be taken to stop and start access symbol precisely where access starts and stops.
- 2) Public access needs to be carefully researched for accuracy. Public access will be shown only on those roads that do not have legal access to BLM lands by nature; i.e., roads on Federal lands and State highways will NOT be highlighted. If it is the intent to highlight a county road as an access road to BLM land, the preferred method (for States that have selected additional route markers) is to label the county road with a county route marker. Public access is assumed for road classifications 1-2. Only public access along road classifications 3-5 and trails across State and private lands leading to BLM lands should be highlighted.

b. NARSC Procedures:

- 1) PLAN AHEAD. Whenever possible, place all public access buffers on one peel plate.
- 2) Digitize road segments that have public access in ARC/INFO. A buffer peel is then generated on the Kongsberg plotter. The buffer centerline is not plotted on the Kongsberg. The public access buffer plate is labeled #6A.
- 3) Color Separation Specifications
Buffer screen - show on #6A BROWN peel
 - a) Buffer width - .04"
 - b) 30% PMS 471 (brown) biangle screen

- 4) The public access road buffer symbology is shown in the BLM State Specific Legend.
- 5) The roads with public access note is located on the Topographic Map Symbols Panel of the map collar.

13. RUINS

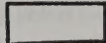
Show for maps in:

Nevada

a. State Procedures:

- 1) States will furnish the NARSC with a stable base color guide keyed to the 100k stable base matte mylar, with Ruins sites shown in their proper location. Show landmark protected sites only.
- 2) State Compilation Specifications

Using a sharp black pencil (2H or harder lead), outline the Ruins site in correct alignment with a solid line and label as "Ruins".

 Ruins

b. NARSC Procedures:

- 1) Scribe the site outline on the #3 BLACK status/boundary scribe plate and show label on the #1 BLACK collar positive.
- 2) Color Separation Specifications
 - a) Ruins site greater than .10" x .10"
 - (1) .02" x .02" square minimum (or) to scale
 - (2) Lineweight - .003"
 - (3) Dash length - .05"
 - (4) Space - .02"
 - b) If Ruins site is less than .10" x .10", use a solid outline.
 - (1) .02" x .02" square
 - (2) Lineweight - .003"

Order type according to the following and show on the #1 BLACK collar positive:

c) Label

- (1) Type style - UNIVERS, CAPS/Lowercase
- (2) Type size - 6 pt.

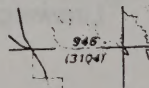
14. SPOT ELEVATION CONVERSIONS

Show for maps in:

Arizona
Colorado
Idaho
Montana (N. Dakota, S. Dakota)
Nevada
New Mexico
Oregon (Washington)
Utah

a. NARSC Procedures:

- 1) Make a list of all metric spot elevations on the map.
- 2) Create a spot elevation conversion file on the Macintosh PC and order pickup of the file.
- 3) Place the metric spot elevation type on the #1 BLACK collar positive in the same location as on the original #4 BLACK composite whenever possible (**STRAIGHT AND LEVEL REGARDLESS of Original Text Placement**).
- 4) Delete all old spot elevations from original #4 BLACK composite plate. Do not delete the actual spot location (the dot).
- 5) Create a mask for the #1 BLACK collar positive.
- 6) Place the foot spot elevation (Conversion Number) type on the #5C MAGENTA positive, using the #1 BLACK collar positive and the frosted mylar composite as guides.
- 7) TYPE PLACEMENT. The foot value (Conversion Number in RED) is placed 1/20" directly below the metric value (BLACK) whenever possible. Use the Type Placement Handout for guidance. DO NOT overprint the spot elevations on other lettering.



- 8) Order type according to the following and show on the #1 BLACK collar positive:
 - a) Type style - UNIVERS OBLIQUE
 - b) Type size - 5 pt.
 - c) Metric value - no parentheses; show on #1 BLACK collar positive
 - d) Foot value - in parentheses; show on #5C MAGENTA collar positive
- 9) Create a mask for the #5C MAGENTA collar positive.

15. TRIANGULATION STATIONS

Show for maps in:

Nevada
Utah

a. State Procedures:

- 1) States will furnish the NARSC with a stable base color guide keyed to the stable base matte mylar. The triangulation symbols will be plotted in sharp, black pencil, according to specifications, maintaining 1/50" (+ or - 169") National Map Accuracy Standards, with elevation and label if present.
- 2) State Compilation Specifications
 - a) Black open triangle with dot in center
 - b) Elevation and label in CAPS/Lowercase if applicable

△ Mac Cue

b. NARSC Procedures:

- 1) PLAN AHEAD. Whenever possible, place all fencelines, found corners, triangulation stations, pipelines, and powerlines on one film positive.
- 2) Digitize triangulation stations in Microstation. A film positive is then generated by the Kongsberg plotter. The positive is labeled #4F.
- 3) If only a few triangulation stations are being added to the map, USGS stickup symbology should be used.

4) Color Separation Specifications

- a) Triangulation symbol - show on #1 BLACK collar positive;
stickup standard USGS 100k symbology.

(1) Lineweight -

Microstation - .006"

USGS symbology - .003"

(2) Triangle side - .07"

(3) Dot diameter - .006"

Order type according to the following and show on the #1BLACK collar positive;

- b) Label - show on #1 BLACK collar positive

(1) Type style - UNIVERS, CAPS

(2) Type size - 6 pt.

- 5) Place triangulation station symbols using the State color guide as a placement guide. Add label and elevation.

16. WELLS AND WINDMILLS

Show for maps in:

California
Nevada
Oregon (Washington)

a. State Procedures:

- 1) States will furnish the NARSC with a stable base color guide keyed to the 100k stable base matte mylar. States will field check and accurately compile well symbols either by photogrammetric method within + or - 169 feet (National Map Accuracy Standards) or paneled to the matte mylar from 1:24,000 quadrangles.

2) State Compilation Specifications

- a) Use a sharp black pencil (2H or harder lead).
- b) Wells - Open black circle with label in CAPS/Lowercase as follows:

o Well

- c) Windmills - Black cross hatch at exact location with label in Caps/Lowercase

X Windmill

b. NARSC Procedures:

1) Wells

- a) If additional drainage is also to be added, scribe wells on the #9A CYAN scribe plate.
- b) If no additional drainage is to be added, show negative symbol and label stickup on the #9 CYAN plate, if possible.
- c) If no additional drainage is to be added, and there are excessive amounts of wells to be added, create a #9B CYAN TYPE positive. Place standard USGS 100k well symbols in the designated locations and add labels.

d) Color Separation Specifications

(1) Well Symbol

- (a) Color - CYAN
- (b) Lineweight - .004" (open)
- © Circle diameter - .033

(2) Well Label

- (a) Color - CYAN
- (b) Type style - SOUVENIR LIGHT ITALIC, CAPS/Lowercase
- © Type size - 6 pt.

2) Windmills

- a) Windmills are placed on the #1 BLACK collar positive. No label is required, unless it has a proper name. Standard USGS 100k windmill symbology is used.

b) Color Separation Specifications

(1) Windmill Symbol

- (a) Lineweight - .003"
- (b) Triangle height - .05"
- © Triangle angles - 75, 30, 75 degrees
- (d) Arms - .045"
- (e) Arm angles - 70, 110 degrees

(2) Label - show on #1 BLACK collar positive

- (a) Type style - SOUVENIR LIGHT ITALIC, CAPS/Lowercase
- (b) Type size - 6 pt.

IV. INSTRUCTIONS FOR NAME CHANGES AND NAME ADDITIONS

Due to the additional detail requested for the new 100k map format, procedures for adding and changing geographic names must be established (See Determining Official Names, **Principles, Policies, and Procedures: Domestic Geographic Names**, page 5 of the booklet which was sent to each State in February 1990, with Information Bulletin No. SC-90-100). These guidelines should be followed when changing or adding any names information. The following are instances when the States might want to change or add information:

- A. New features are added by the State (i.e. drainage) and are named and can be verified on USGS 1:24k source.
 - 1. Fill out a **National Applied Resource Sciences Center Request for Geographic Name Change** form completely and submit it with the color guides which are sent to the NARSC. Omission of information on the form will result in the name change either being rejected or returned to the State for further clarification. It is not necessary to send the source map to the NARSC.
 - 2. Names which can be verified on a USGS 1:24k will be incorporated immediately.
 - 3. When names are verified or rejected, the NARSC will notify the States of verification or rejection of the geographic name. If a name has been rejected, a reasonable explanation will be given on the form.
- B. New features are added by the State and cannot be verified on USGS 1:24k source.
 - 1. Fill out a **Domestic Geographic Name Report** completely and submit with the color guides which are sent to the NARSC.
 - 2. The NARSC will submit all geographic name changes to the Board on Geographic Names in Reston, Virginia. When verification comes through, those names will be incorporated onto the map. It should be noted that most name verification requires at least 2 months and questionable names could take as long as one year. If verification does not come through before the map is ready for printing, the map will be printed without the name addition. When verification does come through, however, the NARSC will note the change on the NARSC Library Copy and the change will be incorporated when the map is reprinted or revised in the future.
 - 3. When names are verified or rejected, the NARSC will notify the States of verification or rejection of the geographic name. If a name has been rejected, a reasonable explanation will be given on the form.

- C. The State wants to change names on existing named features (See Summary of Domestic Geographic Names Policies; 2A, Name Changes).

1. Fill out a National Applied Resource Sciences Center Request for Geographic Name Change form completely and submit it with the color guides which are sent to the NARSC. Omission of information on the form will result in the name change either being rejected or returned to the State for further clarification.
2. Fill out a Domestic Geographic Name Report completely and submit with the color guides which are sent to the NARSC.
3. The NARSC will submit all geographic name changes to the Board on Geographic Names in Reston, Virginia. When verification comes through, those names will be incorporated onto the map. If verification does not come through before the map is ready for printing, the map will be printed without the name addition. When verification does come through, however, the NARSC will note the change on the Errata copy and the change will be incorporated when the map is reprinted or revised in the future.
4. When names are verified or rejected, the NARSC will notify the States of verification or rejection of the geographic name. If a name has been rejected, a reasonable explanation will be given on the form.

**NATIONAL APPLIED RESOURCE SCIENCES CENTER REQUEST
FOR GEOGRAPHIC NAME CHANGE**

PUBLISHED NAME:		
TYPE OF FEATURE:		
SECTION:	TOWNSHIP:	RANGE:
LATITUDE:		LONGITUDE:
SOURCE USED TO CHANGE NAME (1:24k, Other): 		
DESCRIPTION OF FEATURE (where appropriate, give shape, length, width, direction of flow or trend, direction and distance of extremities from points with established names. 		
SUBMITTED BY:	EXT:	DATE:
VERIFICATION/REJECTION OF GEOGRAPHIC NAME		
TO BE ADDED		TO BE CHANGED
COMMENTS: 		

V. APPENDICES

APPENDIX A

BLM BACK COUNTRY BYWAYS

These BLM Back Country Byways and Scenic Byways are current as of the date of these specifications, but are subject to additions and deletions. All current BLM Byways are shown on the appropriate 100k's.

BLM-administered Back Country Byways and Scenic Byways will be shown with a BLM Back Country Byway International-like symbol at each end of the byway/edge of the map and will be labeled as follows:

Arizona

Black Hills National Back Country Byway
Historic Route 66 National Back Country Byway
Hualapai Mountain National Back Country Byway
Parker Dam Road National Back Country Byway

California

Barrel Spring National Back Country Byway
Black Canyon National Back Country Byway
Bradshaw Trail National Back Country Byway
Buckhorn National Back Country Byway
Cedar Canyon National Back Country Byway
Chimney Peak National Back Country Byway
Cima National Back Country Byway
Essex National Back Country Byway
Kelbaker National Back Country Byway
Kelso-Cima National Back Country Byway
Lanfair-Ivanpah National Back Country Byway
Owens Valley-Death Valley National Back Country Byway
Saline Valley National Back Country Byway
Wild Horse Canyon National Back Country Byway

Colorado

Alpine Loop National Back Country Byway
Gold Belt National Back Country Byway
Los Caminos Antequous National Back Country Byway
Unaweep-Tabeguache National Scenic Byway

Idaho

Lewis and Clark National Back Country Byway
Owyhee Uplands National Back Country Byway

Montana

Big Sheep Creek National Back Country Byway
Garnet Range National Back Country Byway
Missouri Breaks National Back Country Byway

Nevada

Bitter Springs National Back Country Byway
California Trail National Back Country Byway
Ft. Churchill-Wellington National Back Country Byway
Gold Butte National Back Country Byway
Lovelock Cave National Back Country Byway
Mount Wilson National Back Country Byway
Red Rock Canyon National Back Country Byway

New Mexico

Chain of Craters National Back Country Byway
Guadalupe National Back Country Byway
Lake Valley National Back Country Byway
Quebradas National Back Country Byway
Wild Rivers National Back Country Byway

Oregon

Christmas Valley National Back Country Byway
Cow Creek Road National Back Country Byway
Diamond Loop National Back Country Byway
Galice-Hellgate National Back Country Byway
Grave Creek to Marial National Back Country Byway
Lakeview-Steens Mountain National Back Country Byway
Leslie Gulch-Succor Creek National Back Country Byway
Lower Crooked River National Back Country Byway
Lower Deschutes River National Back Country Byway
Nestucca River National Back Country Byway
North Umpqua River National Scenic Byway
Snake River-Mormon Basin National Back Country Byway
Steens Mountain National Back Country Byway
South Fork Alsea River National Back Country Byway
South Fork John Day River National Back Country Byway

South Dakota

Fort Meade National Back Country Byway

Utah

Bull Creek Pass National Back Country Byway
Nine Mile Canyon National Back Country Byway
Pony Express Trail National Back Country Byway
Silver Island Mountain National Back Country Byway
Smithsonian Butte National Back Country Byway
Transcontinental Railroad National Back Country Byway

Wyoming

Red Gulch-Alkali National Back Country Byway

Seminole to Alcova National Back Country Byway

South Bighorn-Red Wall National Back Country Byway

There are 4 Back Country Byways and 2 scenic routes in Wyoming, but are subject to change and are subject to change and are subject to change.

It is administered Back Country Byways and scenic routes are subject to change and are subject to change and are subject to change.

Arizona

Back - to Back National Back Country Byway
Historic Route 66 National Back Country Byway
Hualapai Mountain National Back Country Byway
Parker Dam Road National Back Country Byway

California

Barstow Spring National Back Country Byway
Black Canyon National Back Country Byway
Eisenhower Trail National Back Country Byway
Eucalyptus National Back Country Byway
Ogden Canyon National Back Country Byway
Owens Peak National Back Country Byway
Cima National Back Country Byway
Empire National Back Country Byway
Ketchikan National Back Country Byway
Klamath Falls National Back Country Byway
Lander-Vernalis National Back Country Byway
Owens Valley-Dutch Valley National Back Country Byway
Sierra Valley National Back Country Byway
Wild Horse Canyon National Back Country Byway

Colorado

Agave Loop National Back Country Byway
Gold Butte National Back Country Byway
Los Cerrillos-Ancient National Back Country Byway
Mesa Verde National Back Country Byway

Utah

Levee and Clark National Back Country Byway
Canyonlands National Back Country Byway

APPENDIX B

NATIONAL WILD AND SCENIC RIVER SYSTEM

The following rivers (or segments of these rivers) are part of the National Wild and Scenic River System. They will be shown on BLM 100k's with a miscellaneous boundary, a buffer screen and a label. This list is current as of December 1994.

Rivers are classified as wild, scenic, or recreational; however, for labeling purposes, each river in the system is labeled as a 'Wild and Scenic River'.

Arizona

Verde River

California

American (Lower) River
American River, North Fork
Big Sur River
Eel River
Feather River, Middle Fork
Kern River
Kings River
Klamath River
Merced River
Sespe Creek
Sisquoc River
Smith River
Trinity River
Tuolumne River

Colorado

Cache la Poudre River

Idaho

Clearwater River, Middle Fork
Rapid River
Saint Joe River
Salmon River, Middle Fork
Salmon River
Snake River

Montana

Flathead River, South Fork
Missouri River

New Mexico

Owyhee River, North Fork
Jemez River, East Fork
Pecos River
Rio Chama
Rio Grande River

Oregon

Big Marsh Creek
Chetco River
Clackamas River
Crescent Creek
Crooked River
Crooked River, North Fork
Deschutes River
Donner and Blitzen River
Eagle Creek
Elk River
Grande Ronde River
Illinois River
Imnaha River
John Day River
John Day River, North Fork
John Day River, South Fork
Joseph Creek
Klamath River
Klickitat River
Little Deschutes River
Lostine River
Malheur River
Malheur River, North Fork
McKenzie River
Metolius River
Minam River
North Powder River
Owyhee River
Owyhee River, West Little
Powder River
Quartzville Creek
Rapid River
Roaring River
Rogue River
Rogue River, (Upper)
Salmon River
Sandy River
Smith River, North Fork
Snake River

Oregon continued

Sprague River, North Fork

Squaw Creek

Sycan River

Umpqua River, North

Wallowa River

Wenaha River

White River

White Salmon River

Willamette River, North Fork of the Middle Fork

Washington

Skagit River

White Salmon River

Wyoming

Clarks Fork of the Yellowstone

APPENDIX C

NATIONAL TRAILS SYSTEM

These National Trails are current as of the date of these specifications, but are subject to additions and deletions.

National Recreation Trails in the National Trail System are listed in NPS's Register of National Recreation Trails, January 1993, and are too numerous to list in this appendix.

The following scenic and historic National Trails, which are NOT administered by BLM, will be shown on the appropriate 100k's. These trails are labeled as follows when they appear on BLM 100k's:

Arizona

Juan Bautista De Anza National Historic Trail (NPS)

California

Juan Bautista De Anza National Historic Trail (NPS)
Pacific Crest National Scenic Trail (USFS)

Colorado

Continental Divide National Scenic Trail (USFS)
Santa Fe National Historic Trail (NPS)

Idaho

Continental Divide National Scenic Trail (USFS)
Lewis and Clark National Historic Trail (NPS)
Nez Perce (Nee-Me-Poo) National Historic Trail (USFS)
Oregon National Historic Trail (NPS)

Montana

Continental Divide National Scenic Trail (USFS)
Lewis and Clark National Historic Trail (NPS)
Nez Perce (Nee-Me-Poo) National Historic Trail (USFS)

Nebraska

Mormon Pioneer National Historic Trail (NPS)
Oregon National Historic Trail (NPS)

New Mexico

Continental Divide National Scenic Trail (USFS)
Santa Fe National Historic Trail (NPS)

North Dakota

Lewis and Clark National Historic Trail (NPS)
North Country National Scenic Trail (NPS)

Oregon

Lewis and Clark National Historic Trail (NPS)
Oregon National Historic Trail (NPS)
Pacific Crest National Scenic Trail (USFS)

South Dakota

Lewis and Clark National Historic Trail (NPS)

Utah

Mormon Pioneer National Historic Trail (NPS)

Washington

Lewis and Clark National Historic Trail (NPS)
Pacific Crest National Scenic Trail (USFS)

Wyoming

Continental Divide National Scenic Trail (USFS)
Mormon Pioneer National Historic Trail (NPS)
Oregon National Historic Trail (NPS)

BLM Library
Bldg. 50
Denver Federal Center
P.O. Box 25047
Denver, Colorado 80225

